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The CHEMIST AND DRUGGIST

for RETAILER - WHOLESALER - MANUFACTURER

Established 1859

28 Essex Street, Strand, London, W.C.2

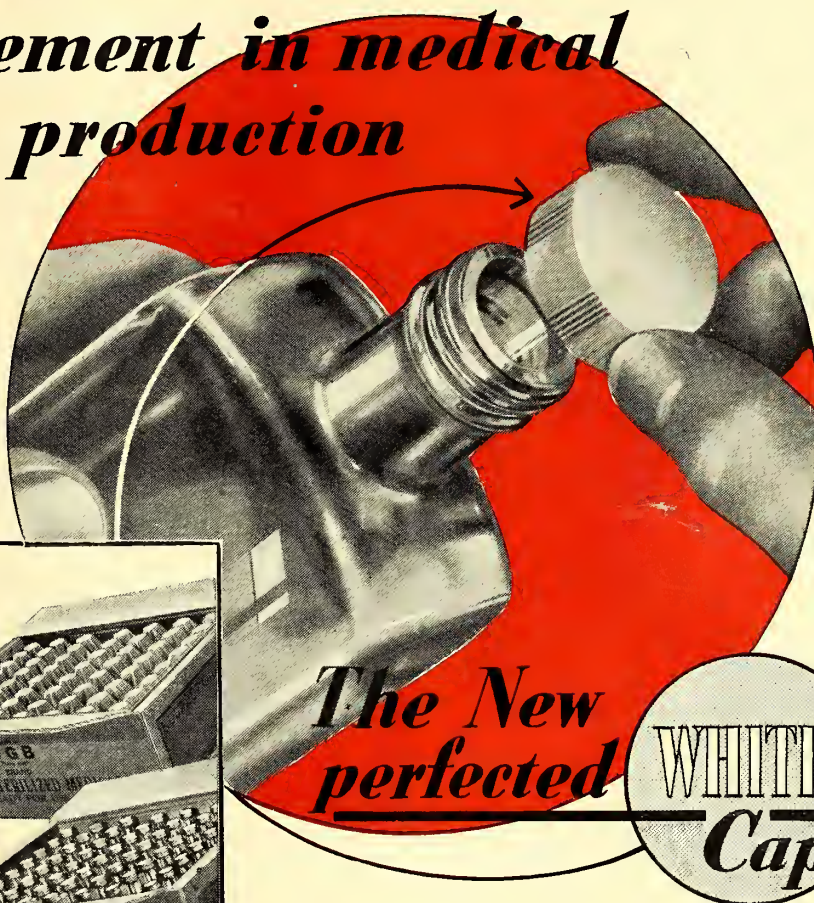
Registered as a Newspaper

No. 3080
VOL. CXXX

FEBRUARY 18, 1939

Annual Subscription (with
Diary) 20/- Single Copies 9d.

Another scientific achievement in medical bottle production



Cork Mouth. Photograph of actual package of Cork-mouth bottles with cover removed.

White Enamelled Aluminium Screw Cap. Photograph of actual package of screw-cap bottles with the cover removed.

White Korkalite Moulded Cap. Photograph of actual package of bottles with White Korkalite Moulded Caps.



At last the strong preference for a Medical bottle with a White moulded cap has been achieved by U.G.B. The cost obstacle has been overcome and U.G.B. technicians have produced a Medical bottle with a perfected White cap manufactured from Urea Powder—tasteless and odourless—fitted composition Cork Liners Resistol faced. The Cork-Mouth and White Enamelled Aluminium Screw Cap Washed and Sterilized services are unchanged

UNITED GLASS BOTTLE
MANUFACTURERS LTD

8 LEICESTER STREET, W.C.2

The Largest Manufacturers of Glass Bottles in Europe

Telephone: Gerrard 8611 (10 lines)
Telegrams: Unglaboman, Lesquare, London

Index to Advertisers, pp. 5 & 6.

BRITISH INDUSTRIES FAIR NUMBER

*Don't reduce your
takings and profits!*

Sell

Euthymol
TOOTH PASTE

- (1) NO PRICE REDUCTION
- (2) NO SIXPENNY SIZE
- (3) ON THE P.A.T.A. FOR
OVER 25 YEARS



Minimum Retail Price — 1s. 3d. per tube



Send for Bonus Terms to :—

PARKE, DAVIS & CO., BEAK STREET, LONDON, W.1

Adoption of a trade name

Glucose-D, prominent on the C.F. list since the first months of the scheme, is a quick selling, profitable line, rigorously restricted to chemists. Because it is C.F. and because outside traders want it, there have sprung up several very close imitations available to any retailer. The descriptive name "Glucose-D," introduced by Glaxo Laboratories in 1931, cannot be registered in this country. So, unless a protective trade name is adopted, legitimate pharmacy is in grave danger of being forced to share the very popular glucose business with other traders.

Glaxo Laboratories Ltd., are determined, however, that Glucose-D shall remain a "chemists only" line.

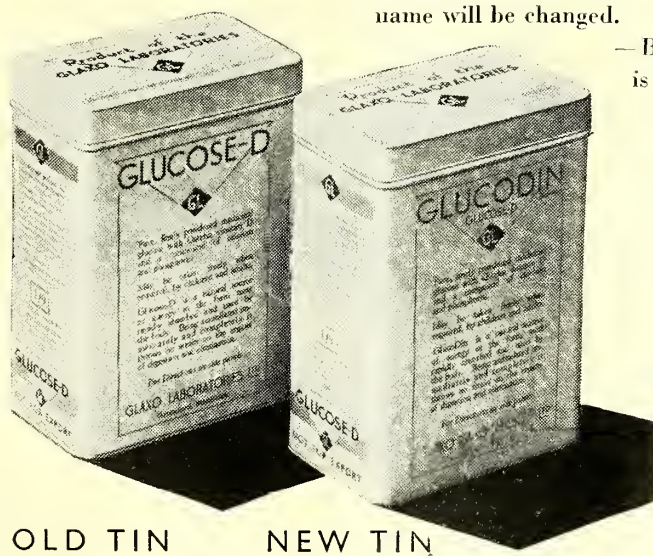
In future, therefore, Glucose D
will be named **GLUCODIN**

The colour, style and wording of the original tin will be retained; only the name will be changed.

—By making it clear to your customer that GlucoDin is the original Glaxo Glucose-D, you will . . .

1. . . hold and increase your present sales of Glucose-D.
2. . . defeat the multifarious attempts to "get round" the C.F. scheme by firms who may imitate C.F. lines for sale outside the legitimate drug trade.
3. . . defend your own interests and the vital principles of the C.F. movement.
4. . . prove that chemists can retain the sale of a product after they have helped to build it up.

Glaxo Laboratories, Ltd., are confident that every member of the N.P.U. will co-operate wholeheartedly, to make every customer ask in future for **GLUCODIN**.



Bonus terms showing 41% profit available until March 13th.

GLAXO LABORATORIES LTD., GREENFORD, MIDDX. BYRON 3434

In Rain...In Shine
In Winter...
In Summer...
**IT NEVER
VARIES**

 SET FAIR 	 CLOUDY 	 RAIN 
 SNOW 	 FOG 	 OUTLOOK UNCERTAIN 
 STORMY 	 FREEZING 	 SET FAIR 
 CLOUDY 	 RAIN 	 SNOW 
 FREEZING 	 SET FAIR 	 CLOUDY 
 RAIN 	 SNOW 	 FOG 
 OUTLOOK UNCERTAIN 	 STORMY 	 FREEZING 

Changeless in a changing world. Solco Spirit is as reliable as the sun and moon and earth together. In little drums or in large deliveries Solco Spirit arrives as punctually and as certainly as the sunrise. Whichever spirit you use, and whatever your use for it, you can be certain of ever getting the same pure spirit, conforming easily with every specification known.

SOLCO SPIRIT

INDUSTRIAL METHYLATED SPIRIT • PERFUMERY METHYLATED SPIRIT
(all grades)
S.V.R. • PLAIN BRITISH SPIRIT • MINERALISED METHYLATED SPIRIT

SOLVENT PRODUCTS LTD

TEMPLE BAR



BUSH HOUSE, LONDON, W.C.2

2237-8

Crookes'

HALIBUT LIVER OIL



APPEALING NEW SHOWCARD IN 12 COLOURS

70% profit on outlay
— from special bonus terms

Designed to attract the interest of every mother, this new showcard will bring more people than ever into your shop to buy Crookes' Halibut Liver Oil. It is beautifully printed in 12 colours and will link your shop with our nation-wide advertising in all the important daily, weekly and monthly journals.

Send to-day for your free showcard — and ask for full details of the attractive bonus terms which show a profit of 14/- for every £1 outlay.

THE CROOKES LABORATORIES (British Colloids Ltd.) PARK ROYAL, LONDON, N.W.10

After Influenza-



RECOMMEND

'Bioferol'

Trade Mark

Brand of

NUTRIENT TONIC

A FULL return to health and vigour is often distressingly slow after an attack of influenza, or even a severe cold in a debilitated patient. 'Bioferol,' which is an organic preparation of haemoglobin and liver extract, is of genuine value in assisting recovery.

The method of preparation enables the haemoglobin to persist unchanged, so that iron can be rapidly and completely absorbed without in any way hindering the digestive tract, and the addition of a liver extract increases the general efficacy.

'Bioferol' is indicated in any condition in which a tonic is required and is particularly suitable for children.

P.A.T.A. DISPLAY TERMS

Until 28th February, 1939, the P.A.T.A. terms for 'Bioferol' will be fourteen to the dozen on orders for a minimum quantity of 1 dozen (retail price: 3/9 per bottle).



BAYER PRODUCTS LIMITED

AFRICA HOUSE, KINGSWAY, LONDON, W.C.2



Northern Office (information only), BLACKFRIARS HOUSE, PARSONAGE, MANCHESTER, 3

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[Continued overleaf.]

DOUBLE OPPORTUNITY FOR PROFIT!

RETAIL PRICES :

'CURICONES.' One bottle 5/-
Three bottle package 14/-
Six bottle package 24/-

Write to-day for details to :
STEPHEN MATTHEWS & CO., LTD.
Manufacturing Chemists
19/21 FARRINGDON ST., LONDON, E.C.4

CURICONES

ANTI-RHEUMATIC CAPSULES

National Advertising and the recommendation of over 6,000 doctors are building 'Curicones' into a household word. Share in the vast weekly sale of over 300,000 capsules!

And—

STE-MAT

NASAL BALM

In a nation-wide investigation 81% of sufferers stated that they found STE-MAT more effective than any other cold or catarrh remedy they had tried.

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NOW

is the season for **Record Sales**
OF
BRAND'S ESSENCE

THE weather is treacherous! Ills and chills abound! NOW is the time for peak sales of BRAND'S ESSENCE, the life-giving safestimulant which enjoys the complete confidence of doctors and the general public. Build up your stocks to benefit fully from the big demand created by BRAND'S far-reaching and scientifically-planned advertising. Feature BRAND'S eye-catching display material in your windows and on your counter—IT COSTS YOU NOTHING. And be sure to ask about our FREE WINDOW DRESSING SERVICE.

The Display Unit is in natural colour and is quite ready for use without assembling. It incorporates six dummy cartons of Brand's Essence, thus avoiding stacking and soiling your own stock. There are also three gaily COLOURED SHOWCARDS which hang or stand; and a set of FOUR CROWNERS for Brand's Essence Cartons.

**FREE display material
in colours
to back BRAND'S
most concentrated
press campaign**

POST THIS COUPON NOW

Please send me at once, and free of charge, display material as under:

.....Three-dimensional Display Stand(s)

.....Set(s) of Crowners for Brand's Essence Cartons.

.....Set(s) of Coloured Showcards

Name.....

Address.....

BRAND & CO. Ltd.
Mayfair Works, Vauxhall, London, S.W.8

Invest in the best



... it's the profit-making policy!

The Public know the Veno Products as their very good friends. For strong healthy nerves they ask for Dr. Cassell's brand Tablets. For freedom from pain and a rapid victory over 'flu they now demand Phensic brand. To stop their cough they need the famous Venos brand Lightning Cough Cure. And there is not a man or woman who does not know that Germolene brand Ointment 'soothes at a touch.' This amazing Public Good Will is yours! Display the Veno Products—and benefit! Send now for latest show material. Address :

- VENOS COUGH CURE
BRAND
- DR. CASSELL'S TABLETS
BRAND
- GERMOLENE OINTMENT
BRAND
- PHENSIC
BRAND

VENO DRUG CO. LTD.

CHESTER ROAD · MANCHESTER · 16

EVERYWHERE

PHARMACISTS
ARE ADOPTING

C.O.B.

All over the world the C.O.B. method of packing is gaining new adherents.

The claim that it establishes Goodwill is repeatedly confirmed by our customers, one of whom writing from South Africa says: —

"I may add that C.O.B. lines have been a huge success, and have brought me a number of new customers through recommendation."



write **NOW** for
full details to -

ARTHUR H. **COX** & CO. LTD. BRIGHTON



One of the biggest National advertising campaigns ever put behind a perfume will be launched by Goya in March. A front page of the *Daily Mail* will appear on March 10th and will be supported by subsequent big space advertising. Commanding advertisements will also appear regularly in the *Daily Sketch*, the *Daily Mirror*, the *Glasgow Bulletin* and in a comprehensive list of the most popular and successful women's magazines.

OVER 20,000,000 ADVERTISEMENTS MONTHLY!

Advertising will continue on this scale right through till Christmas. Every month over 20,000,000 advertisements for Goya will appear! They will be read repeatedly by millions of women! Your customers will see them week after week, month after month. It will pay you to display Goya!

NEW CUSTOMERS, REGULAR CUSTOMERS!

Goya's one shilling handbag phial is already a proved best seller, and because women are so enthusiastic about this



new inexpensive way of buying really good perfume, its percentage of repeat business is probably the highest in the trade (sales for 1938 showed a steady monthly increase of 30%!) So Goya means not only *new* customers for you but *regular* customers. And that means the sort of profits you want—consistent, dependable, increasing!

ORDER GOYA TODAY

This year millions more women, your customers among them, will know about Goya. ORDER NOW! Remember the front page of the *Daily Mail* appears in less than a month's time!



Obtainable from all wholesalers or, direct, less 7½% discount for cash (with order or on delivery). Attractive show cards and counter testing sets will be sent free on request.

* * *

Some of the papers in which Goya advertising will appear.

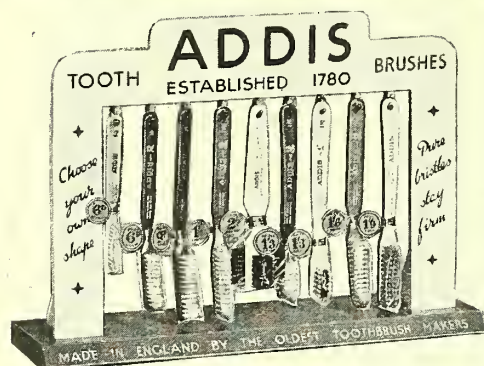
DAILY MAIL (Front page March 10th)
DAILY MIRROR
DAILY SKETCH
GLASGOW BULLETIN
WOMAN'S FAIR
WOMAN'S JOURNAL
WOMAN & BEAUTY
BRITANNIA & EVE
MODERN WOMAN
MISS MODERN
WOMAN'S SPHERE
MY HOME
WOMAN'S ILLUSTRATED
VOGUE
Etc., etc., etc.



GOYA • PICCADILLY • LONDON • W. 1

No postage or cash on delivery fees charged to customers, however small their order.

ADDIS 100% DEAL



SMART SHOWSTAND
(CELLULOSED)

RED and CREAM

THIS SHOWSTAND

AND

A BONUS

OF

NINE TOOTHBRUSHES
FREE

WITH EACH ORDER FOR
THE ASSORTMENT OF TOOTHBRUSHES
DETAILED BELOW

HIGH CLASS BRUSHES
HYGIENICALLY PACKED

IN

CELLOPHANE BAGS

with price tickets attached

.....

GOOD BRUSHES AND GOOD PROFITS

MEAN A GOOD DEAL

.....

COST			TOOTHBRUSHES		SELL		
£	s.	d.			£	s.	d.
3	2		1 doz. No. 60 Childs	Retail 6d.	6	0	0
3	8		1 doz. No. 58 Adults	„ 6d.	6	0	0
5	2		1 doz. No. 67 „	„ 9d.	9	0	0
6	8		1 doz. No. 136 „	„ 1/-	12	0	0
7	3		1 doz. No. 173 S/H	„ 1/3	15	0	0
7	0		1 doz. No. 170 „	„ 1/3	15	0	0
8	4		1 doz. No. 111 Crystal	„ 1/6	18	0	0
11	0		1 doz. No. 140 U/B	„ 1/9	1	1	0
16	0		1 doz. No. 88 Denture Brush	„ 2/-	1	4	0
3	8	3			6	6	0
-	-	-	ADD 9 FREE BRUSHES		10	6	
£3	8	3			£6	16	6

£3-8-3 Profit on £3-8-3 cost=100%

ORDER THROUGH YOUR WHOLESALE

Specify "ADDIS 1939 DEAL"—OFFER CLOSES DEFINITELY 31 MARCH, 1939

ADDIS BRUSH WORKS

HERTFORD

THE OLDEST FIRM OF TOOTHBRUSH MAKERS IN THE WORLD · ESTABLISHED 1780



DRENE

BONUS OFFER

to introduce amazing new Special Drene for Dry Hair

ENDS FEBRUARY 28

One FREE BOTTLE with every 11 purchased of Regular and Special Drene

Subject to only one condition—that you give Drene 14 days display on your counter and in your window.

BONUS APPLIES TO BOTH KINDS OF DRENE AND TO ALL SIZES. NO QUANTITY LIMIT. YOU CAN DOUBLE UP. Give Special Drene and Regular Drene prominent display.

Now that there are two kinds of Drene, you can offer your customers the ideal shampoo they

need for their particular kind of hair—whether it's normal, greasy or dry.

And the introduction of Special Drene for dry hair is being backed by the greatest advertising campaign ever employed to launch a shampoo.

FRONT PAGE, DAILY MAIL
PAGE 3, DAILY EXPRESS
LARGE SPACES IN

NEWS OF THE WORLD **PEOPLE**
SUNDAY EXPRESS **DAILY MIRROR**
COLOUR PAGES IN

WOMAN **WOMAN'S OWN**
are introducing Special Drene for dry hair to 20,133,000 readers.

SO SEND YOUR ORDERS NOW!

ORDER FORM Order today from your Wholesaler or send this coupon direct to us, Thomas Hedley & Co., Ltd., Brettenham House, Wellington St., London, W.C.2

Please send me

REGULAR DRENE

..... cases 6d. size (3 doz. bottles to case)
..... cases 1/6 size (1 doz. bottles to case)
..... cases 2/6 size (½ doz. bottles to case)

SPECIAL DRENE

..... cases 6d. size (3 doz. bottles to case)
..... cases 1/6 size (1 doz. bottles to case)
..... cases 2/6 size (½ doz. bottles to case)

Under conditions of Bonus Offer.

NAME.....

ADDRESS.....

C.D.2.



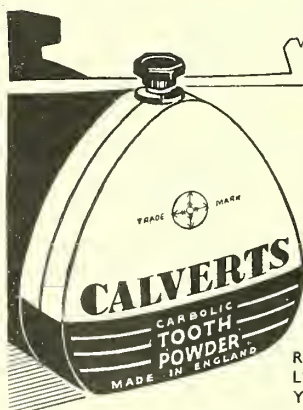
SELECTIVELY DISTRIBUTED

CALMON & NEATE LTD., 8 Gerrard Street, LONDON, W.1

Telephone : Gerrard 3972

CALVERT'S 'AIRFLOW' FLASK

An Ideal Pack for
Every Purpose



- So convenient
- Cannot spill
- Simple to use
- Profitable to sell

This Ingenious new container, recently introduced by Press and Radio advertising, makes Calvert's Tooth Powder, always the finest cleaner, now the most convenient to use.

Retail 1/- each.
List Price : 8/- per doz.
Your usual Wholesaler stocks it.

F.C. CALVERT & Co. Ltd. - Manchester, 11

WANIE BLADES

KEEN EDGES
KEEN PRICES

Your profit is 33½ to 45% every time you hand a customer a packet of Wanie Blades.

THREE HOLE TYPE
8/- gross. Retail 12 for 1/-

AUTO TYPE
9/- 100. Retail 10 for 1/8

EVER READY TYPE
9/- 100. Retail 10 for 1/8

DISPLAY SHOWCARDS
FREE TO ALL STOCKISTS

Dealers and Wholesalers
should write for FREE
SAMPLES and Trade Terms.

LONDON & PROVINCIAL FACTORS LIMITED
146, THEOBALDS ROAD, LONDON, W.C.1.
and at 16 Withy Grove, Manchester.

COMMENCING MONDAY, FEB. 20th

AMAMI SHAMPOOS

Bonus OFFER

14 TO THE DOZEN!

MINIMUM ORDER 31/6
LESS USUAL 10% DISCOUNT 30 DAYS... 28/4

You can make up your parcel to suit your own requirements, but here are two suggestions :

PARCEL (A)

	Per doz.	Cost Price s. d.	Selling Price s. d.
1 doz. 6d. Shampoos No. 1	- - - 4/6	4 6	6 0
1 doz. 6d. Shampoos No. 5	- - - 4/6	4 6	6 0
1 doz. 6d. Liquid Soapless	- - - 4/6	2 3	3 0
1 doz. 3d. Shampoos No. 12, Soapless Dark Hair	- - - 2/3	2 3	3 0
1 doz. 3d. Shampoos No. 12, Soapless Fair Hair	- - - 2/3	2 3	3 0
3 doz. 3d. Shampoos No. 1	- - - 2/3	6 9	9 0
3 doz. 3d. Shampoos No. 5	- - - 2/3	6 9	9 0
1 doz. 3d. Shampoos No. 4, dry	- - - 2/3	2 3	3 0
BONUS 14 to the dozen on above	- - -	FREE	7 0

Less 10 per cent. 30 days - - - £1 11 6 £2 9 0
3 2

£1 8 4

PROFIT £1 . 0 . 8

PARCEL (B)

	Per doz.	Cost Price s. d.	Selling Price s. d.
1 doz. 6d. Shampoos No. 1	- - - 4/6	2 3	3 0
1 doz. 6d. Shampoos No. 5	- - - 4/6	2 3	3 0
1 doz. 6d. Liquid Soapless	- - - 4/6	2 3	3 0
4 doz. 3d. Shampoos No. 1	- - - 2/3	9 0	12 0
4 doz. 3d. Shampoos No. 5	- - - 2/3	9 0	12 0
1 doz. 3d. Shampoos No. 4, dry	- - - 2/3	2 3	3 0
1 doz. 3d. Shampoos No. 12 Soapless Dark Hair	- - - 2/3	2 3	3 0
1 doz. 3d. Shampoos No. 12 Soapless Fair Hair	- - - 2/3	2 3	3 0
BONUS 14 to the dozen on above	- - -	FREE	7 0

Less 10 per cent. 30 days - - - £1 11 6 £2 9 0
3 2

£1 8 4

PROFIT £1 . 0 . 8

All Bonus Parcels despatched direct to you, and invoiced direct, or to your usual wholesaler. Order through your wholesaler, or direct from
Prichard & Constance (Mfg.) Ltd., 167 High Holborn, W.C.1.

OPEN UNTIL APRIL 30th, 1939

14 to the Dozen!
Assorted to your own requirements

This will interest **YOU!**



NUFOAM

VITAMIN HAIR TREATMENT SHAMPOO
Shampoo Treatment, Hair Revitalizer and Reconditioner all in one. Three Shampoos in every 6d. tube. Each tube in attractive carton, 12 tubes in useful display outer.



NULON

for NAIL CULTURE. Each 6d. tube in attractive carton, 12 tubes in useful display outer

TWO NEW NATIONALLY ADVERTISED LINES and a SPECIAL INTRODUCTORY OFFER

We have the honour to introduce to the trade two outstanding products of merit—**NUFOAM VITAMIN HAIR TREATMENT SHAMPOO** and **NULON** for Nail Culture, worthy companions to Nufix, the leading quality hair-dressing.

We are confident of public appreciation and acceptance of these Nationally Advertised quality products . . . sold to the public at a popular price.

Take advantage **NOW** of this **SPECIAL INTRODUCTORY BONUS OFFER** and send your order without delay to:—

WALDEN & CO. (Nufix) LTD.

Nufix Works, Rookery Way, London, N.W.9

If desired goods can be ordered through usual Wholesaler

AMAZING INTRODUCTORY OFFER OVER 55% PROFIT

COMMENCING FEB. 1,
CLOSING MAR. 31,
1939.

EACH

3 DOZEN

(One product or assortment of both)

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@ 4/- per doz. net.

(Minimum: 3 doz. carriage paid during bonus period stated above)

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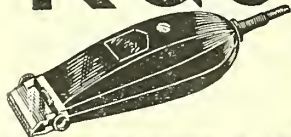
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Over 6,000,000 messages every week, many of these going to **YOUR** customers—you cannot afford to miss this opportunity. Stock the Raselet—your customers will ask you for it. Exceptionally attractive and unusual show material is available.

Send for full details, trade terms, etc., to:—

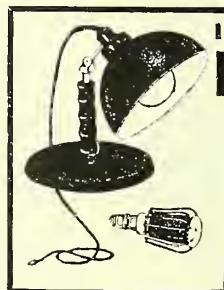
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Raselet



ELECTRIC DRY SHAVER

The Raselet has a small shaving head specially designed to fit every contour of the face and detachable to enable thorough cleaning. In white and attractive colours—retail price £3 : 7 : 6.



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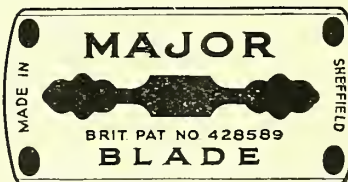
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Makers of Electro-Therapeutic Equipment for Hospitals, etc.

SOMETHING NEW FOR CHEMISTS

Retail
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Retail
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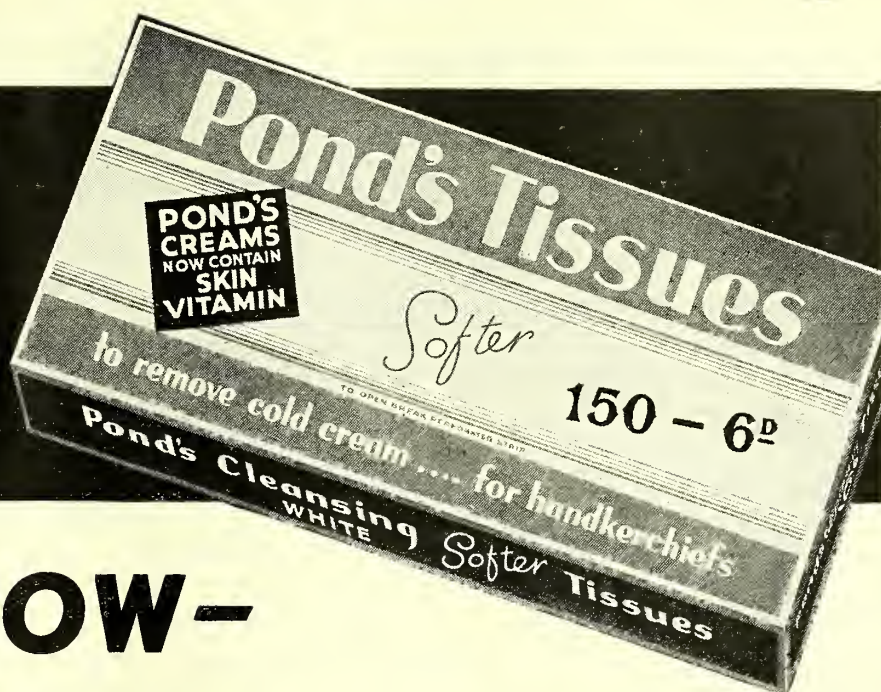
The Slotted "Major" Blade fits
Three-peg and Bar-Type Razors.

SAMPLE AND TERMS FROM—

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IMPORTANT NOTICE

The increasing demand for Pond's Cleansing Tissues has now made it possible for Pond's to give still greater value!



NOW—

150 sheets in the 6d. pack and 318 sheets in the 1/- pack

(BOTH SIZES AVAILABLE in WHITE or PEACH)

(NOT APPLICABLE IN EIRE)

— the biggest value on the market

NOT only is there a new, more striking pack for Pond's Cleansing Tissues, but now every pack contains *more sheets* of tissues — 150 in the 6d. size, 318 in the 1/- size. So Pond's Cleansing Tissues today offer the biggest value on the market.

This great increase in value is sure to mean a big increase in sales of these softer, more absorbent tissues that bear the famous Pond's name.

Be sure to get your share of this increased business. Stock Pond's Cleansing Tissues — display them.

YOU CAN EXCHANGE YOUR PRESENT STOCKS

Your stock of the old packs will be exchanged if you will return them to the address below with your name and address and a note of the quantity.

POND'S EXTRACT CO. LTD., Perivale, Middlesex

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PACKED IN
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The New
**HOLLOW EDGED
PEDICURE
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need supplied at
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No more inconvenience in

TOE TRIMMING

*For the ordinary or most STUBBORN
type of nail. Easily manipulated*

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CHAMPION & CO.,
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London Office: FINSBURY COURT, LONDON, E.C.2

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**TINCTURES RESINOIDS
OLEO-RESINS MEDICINAL RESINS**

FOR EXPORT

**Specially prepared Non-
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Tinctures, Concentrated
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WILLIAM RANSOM & SON

ESTABLISHED 1846

Ltd.

Manufacturing Chemists

HITCHIN near LONDON

Important ANNOUNCEMENT



Following the instantaneous success of the first Woman's Fair at Olympia in November, 1938, the Organisers, Exhibition Promoters (Olympia) Ltd., have pleasure in announcing *Woman's Fair for 1939*.

Over 500,000 people visited the Fair in November last, far and away the largest attendance ever known for the opening year of any exhibition on record. Exhibitors in all sections were enthusiastic in their praise of the business resulting from the creation of this great new marketing centre.

Woman's Fair and Modern Homes Exhibition, Olympia, for 1939, which will be open for 21 days, from November 7th to 30th inclusive, is already fast taking shape. New attractions are being created, new ideas are being evolved which will make this the biggest, most brilliant exhibition spectacle of all time.

The Organisers are also pleased to announce that, as before, the entire publicity direction of Woman's Fair Olympia for 1939 will be in the hands of Odhams Press Ltd.

One of the outstanding features of the 1939 Exhibition will be the **BEAUTY AND HAIRDRESSING SECTION**, which will occupy the **WHOLE** of the **EMPIRE HALL**. Here women will throng in their thousands in search of the newest beauty ideas—eager to see the dozens of make-up demonstrations by leading experts which will be held daily. A considerable amount of space in this section has already been reserved. Over 200 exhibitors who were at the 1938 Woman's Fair have already spontaneously made application for space in the 1939 show.

You will certainly be well advised to complete no exhibition plans for 1939 until you have ensured representation at the great national event which, in a few months from now, will command the attention of all Britain—Woman's Fair Olympia. It will be to your advantage and will considerably assist the Organisers if you could, without commitment, of course, send early intimation of your possible space requirements to :—F. E. Gordon, (Organising Director), Exhibition Promoters (Olympia) Ltd., 32, St. James's Street, London, S.W.1.

WOMAN'S FAIR AND MODERN HOMES EXHIBITION OLYMPIA

— NOVEMBER 7th-30th 1939 —

See our range of

STERLING
BRAND
CHEMICALS

THE ASSOCIATION OF BRITISH
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General Inquiry Office will be
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at the

B. I. F.
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 "BRITISH WARM"
 "SLEEPING BEAUTY"
 "SUN"
 "HARD WEAR"
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 "LULLABY"
 "DURANCE"
 "HOSPITAL QUALITY"
 "RELIANCE DE LUXE"
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 "COSY COT"
 "CHEMISTS' OWN"



These are some of the well-known trade-marks and brand names on Reliance Seamless-moulded Hot Water Bottles. They are a guarantee of satisfaction.

"RELIANCE" BOTTLES ARE THE ORIGINAL BRITISH, AND ARE THE LARGEST PRODUCTION IN THE WORLD.

Founded in 1889 Reliance celebrates its Jubilee this year during the Fair, so please do not fail to call at our Stand so that you may see how this success has been earned.

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LOTS ROAD, CHELSEA, S.W.10



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 OLYMPIA & EARLS COURT LONDON
SEE OUR EXHIBIT

STAND A.719
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PERFUMERY AND
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BUSH

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ASSOCIATION OF BRITISH CHEMICAL MANUFACTURERS

(STAND No. A643) are exhibiting
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★ ASPIRIN "FRE-FLO" BRAND ★

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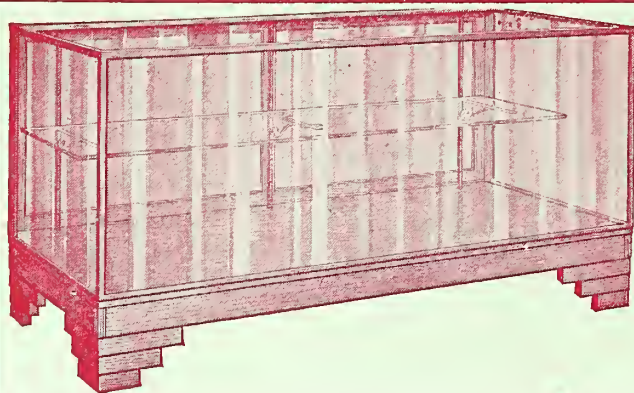
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row of 12-in. glass shelves.

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Carriage extra

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Regular, because once she's tried
'TOWN TALK' Silver Polish she'll
use no other. And remember she's
not the only one, for 'TOWN
TALK' Silver Polish is consistently
advertised in National Daily News-

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monthly. Therefore new users are
constantly increasing.

Display these repeat order
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Got YOURS?

OUR offer to readers of this journal
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for Chemists" brought requests from
all over the world. The need for an
effective check on all transactions—
cash and credit sales, money paid out
and received on account, is universally
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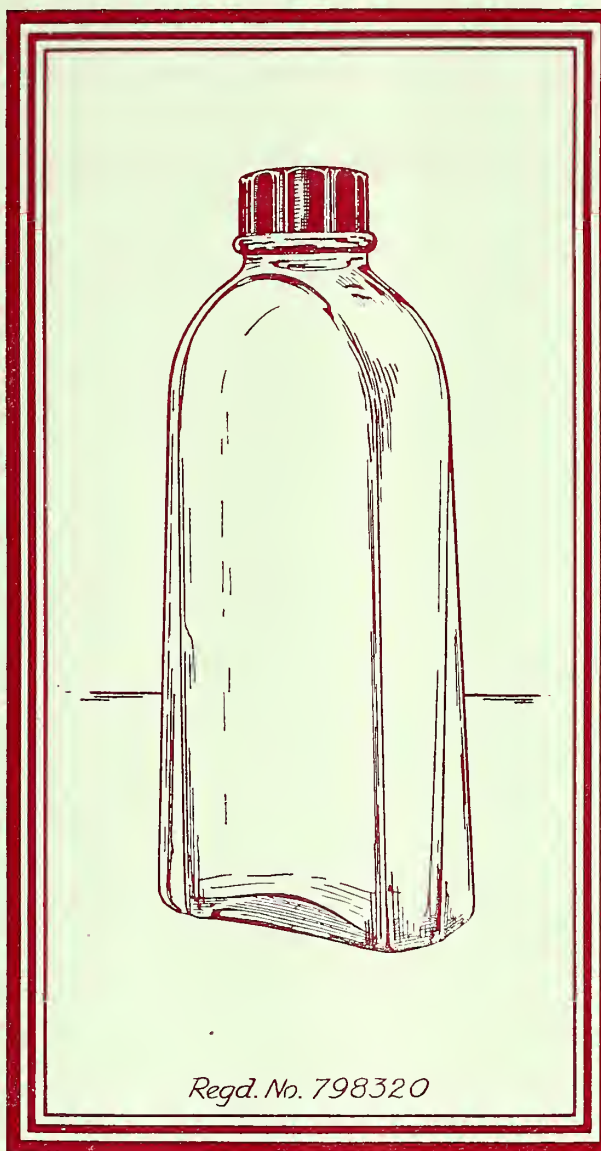
Whatever the class or size of your
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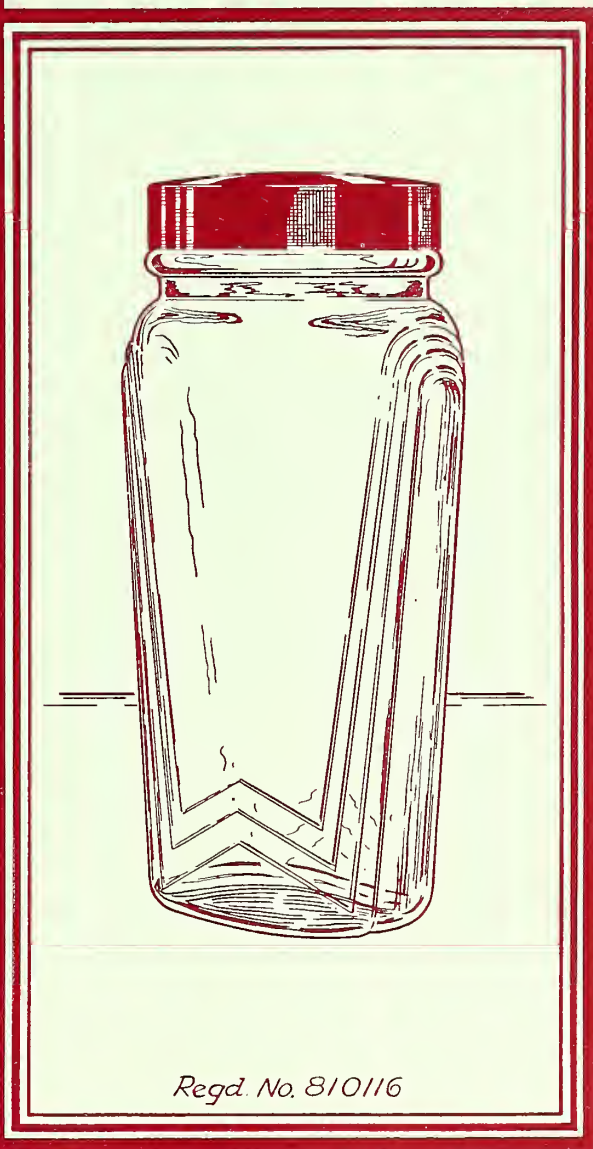
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Ask

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**SUITABLE FOR HAIR CREAM, BATH SALTS
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At present made in 3 oz. with 40 m/m neck, 6 oz. with 51 m/m neck, 8 oz. with 51 m/m neck, 12 and 16 oz. with 58 m/m neck and can be supplied with Black Bakelite, Coloured Beetle and Scarab Caps or Rolled Edge Enamelled, Double Shell or Duplex Caps in various colours.

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**TANK DEVELOPERS and SPECIAL SOLUTIONS
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**FINE GRAIN and OTHER DEVELOPERS, PACKETS, SOLUTIONS
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JOHNSON & SONS Manufacturing Chemists Ltd., HENDON, LONDON



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... FROM THESE WELL-KNOWN EASY-SELLING LINES!

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COTTAGE GARDEN POT POURRI SACHETS

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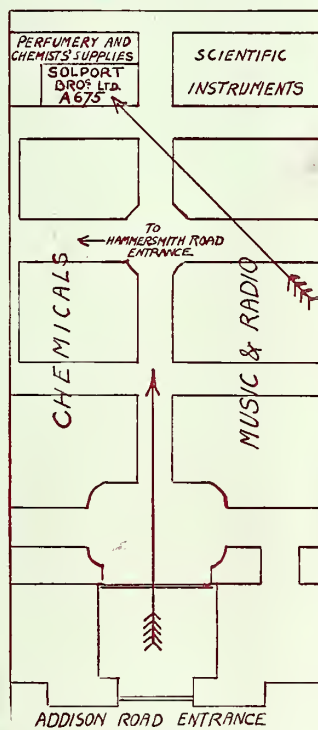


A call at
Stand No.
A. 713
will interest you

Sole Manufacturers of the above:

PAPIER POUDRÉ LTD.

46 Baker Street, London, W.1



We'll See You on Stand A 675 — — —

— the first corner site in the Perfumery and Chemists' Section, Addison Road gangway

We view 1939 with optimism, and are backing our opinion with a bigger and better B.I.F. Stand, where friends old and new will be most welcome. We are encouraged already by greatly increased sales in January, due largely to some fine new Novelties and packing improvements.

"Nerissa" Powder Puffs and "Portia" Waterproof Toiletries still offer you the widest range of modern fancy sundries at the keenest prices, and we hope that the latest display devices will give you the confidence which we think they deserve. We ask you to look especially for "Portia" Sponge Bags and Holdalls in the beautiful new Satins, Silks, and Taffetas, "Nerissa" Powder Puffs in all the recent fashionable colourings, "Beauty Queen" Pads, "Thistledown" Puffs, "Portia" Sports Eyeshades, the new Carded Corn Plasters, and a host of other important sundries, which are surely so necessary to the profit-making side of your business.

It is our hope that we'll see you on Stand A 675, where our representatives from all territories are looking forward to your visit.

SOLPORT BROTHERS LTD., of Goswell Road, LONDON

Buy British Bottles



DISPENSING · EMULSION
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Brylfoam	Toothpaste
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The Radio Times is read by around 3 million families each week. The average family contains four people. So the Radio Times reaches about 12 million people, or more than one-quarter of the total population of the country.

Regular advertisers in this magazine, like "Sloans," "Bemax" and "Milk of Magnesia," talk to these millions and interest them in their products. There are thousands of families in your district who have seen the advertisements illustrated above. Are you displaying them, and letting your customers know that you have them in stock?

**Feature goods advertised in
RADIO TIMES**
Reaches 1 in 4 of your customers

BACKACHE



**PAIN
fades out
as
SLOANS
soaks in**

**Here's the Pain
Where's the SLOANS?**

There's no quicker way of arresting this agonising pain. Just a few drops of Sloans gently applied to the loins and back, and, almost at once, a soothing warmth penetrates to the tortured muscles as Sloans stimulates a brisk flow of health-giving blood which disperses congestion and thus relieves the pain. In the same way Sloans relieves rheumatism, lumbago, sciatica, neuritis, neuralgia, cramp, sprains and lame feet. Buy a bottle from the nearest chemist and get this wonderful relief immediately! 1/9 per bottle.

SLOANS
Brand Liniment
KILLS PAIN

A Disappointed Lady

A pretty girl whom I know was in tears when I met her yesterday.
She's a talented amateur actress with a promising voice. For three years she's worked ceaselessly to get on the London stage, and recently her efforts were rewarded. A London producer agreed to give her a trial in a new musical show. She was thrilled and confident.
But alas! on the great day she couldn't sing a note. A cold had given her a voice like a hasoon, so the part went to another.
"That's the third cold I've had lately," she told me sadly. "I don't know what's the matter with me."
Well, I said, you look fit enough. I should say the trouble is in your food, which isn't giving you sufficient of the protective element that doctors call Vitamin B. Maybe you've heard about that notable book, "The People's Diet"? It confirms that even the richest people's food is often deficient in Vitamins, and a shortage of Vitamin B seriously lowers vitality.


Unfortunately change of diet doesn't necessarily put things right since so much of our has its Vitamin B eliminated by processes of "finement." For that reason I, and many I know, take a tablespoonful of Bemax's B every morning. Bemax is a tonic food enormously rich in Vitamin B. Add it to your cereal or take it in by jove, it certainly seems to do my family are on Bemax now.
To know more about the fascinating world of Vitamins, write for "Vitamins," this valuable little book is free.
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**TO AVOID
Flatulence
AND PAIN
AFTER MEALS**

Perhaps you cannot eat a thing without being painfully reminded that you possess a weak stomach. This is quite unnecessary, as you can prove by taking one or two 'Milk of Magnesia' Tablets after your next meal. If you have never tried these tablets you have not known the effectiveness of indigestion can be so easily overcome. 'Milk of Magnesia' Tablets for sweetening and soothing over-acid, sensitive stomach. Food with you and the work of digestion starts straight away. You get no pain, no flatulence, no distressing fullness. And you can enjoy this easy, pain-free digestion after your next meal. Get the tablets now and try them! Neat flat tins for the pocket, 6d. and 1/- Family size 2/- and 3/6.



MILK OF MAGNESIA
BRAND
TABLETS
NEW HANDY TIN 6D
"Milk of Magnesia" is the trade mark of Phillips' Preparation of Magnesia



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CLINICAL REGD.
The position of the Mercury column is at once perfectly plain. Red markings above 99.4

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A super bandage
unsurpassed for
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tainable from your
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All cloth woven and finished in our works



Our policy is quality

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*When customers
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THE MODERN ANTISEPTIC
SELF-ADHESIVE BANDAGE
SHOWING 19/- PROFIT ON A 21/- OUTLAY

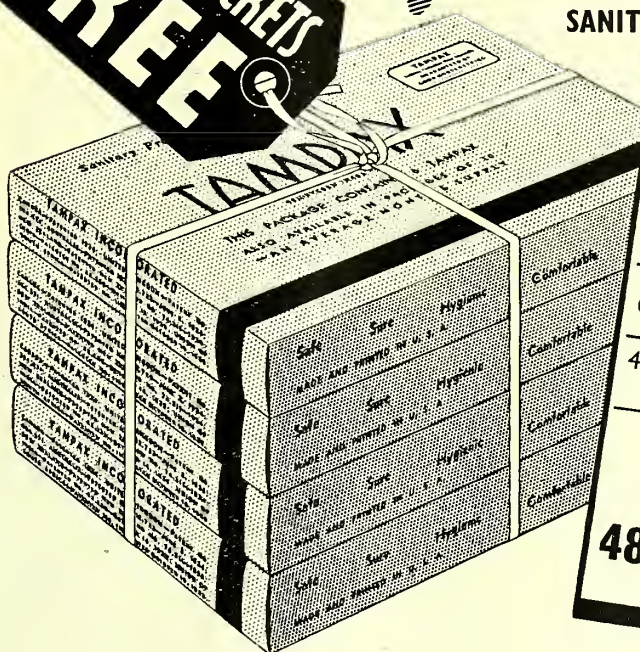
Made in widths of 1, 2, and 3 inches by 4
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your usual wholesaler. For Export Prices
and further details apply to:

DUKE PHARMACEUTICAL Co., Ltd.
123 DUKE ST., LIVERPOOL, 1



Special WINDOW DISPLAY Bonus Parcel of Tampax

**FOUR 1/- PACKETS
FREE**



SANITARY PROTECTION WORN INTERNALLY

ORDER	COST	SELL FOR	PROFIT
One Dozen 1/6 Size	13/6	18/-	4/6
One Dozen 1/- Size	9/-	12/-	3/-
One Dozen 6d. Size	4/6	6/-	1/6
4 Special Bonus Packets	FREE	4/-	4/-
TOTAL OUTLAY 27/-		TOTAL PROFIT 13/-	
48% PROFIT ON COST			

This special bonus offer is for a limited period only—from March 1st to April 15th—for all orders of 1 dozen of each size of Tampax.

Make sure of this extra 4/- profit now by sending in your order for Tampax without delay. It means 48% clear profit on cost. An opportunity not to be missed on a line that sells as well as Tampax.

Tampax is the most sensational success of recent years. Already millions of packets have been sold—and the demand is increasing. Tampax is stocked by over 20,000 dealers, who report record sales for this sensational advance in sanitary protection.

Tampax brings you quick, easy profits every month of the year. It is easier to stock—easier to sell than sanitary towels. Supplied only in small packets of uniform type, Tampax needs a minimum of space for effective display.

A big National advertising Campaign is now running. Women in your district will be buying Tampax where they see it prominently displayed.

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Factory: BELVUE ROAD, NORTHOLT, MIDDLESEX.
Stocked by the leading wholesalers.

OVER 8,000,000 PACKETS OF TAMPAX HAVE BEEN SOLD

WOMEN BUY TAMPAX — where they see it displayed !



CORKS, STOPPERS, ETC.

Send us your enquiries
and compare our prices.
We manufacture corks
of every description.

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We are continuing the Voucher Scheme for another year, but you are now only required to collect the vouchers to the value of £5.5.0 in order to receive 2 dozen boxes of "CAMELIA" Ideal 6d. towels free of charge, thereby increasing the regular profit on your "CAMELIA" purchases from 25% to 33 $\frac{1}{3}$ %.

This voucher offer is available for each £5.5.0 lot you may collect, and any vouchers which you may have in hand, not sent in for the 1938 scheme, may be included towards your total for 1939.

Please note that these vouchers are only valid when the full marked price has been paid.

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Andrews sales show a very satisfactory increase this year and every effort is being exerted to make more and more people look for it—buy it—drink it. The Andrews press, poster and radio publicity is the largest ever embarked upon, and has greater persuasiveness—greater impelling power than ever before.

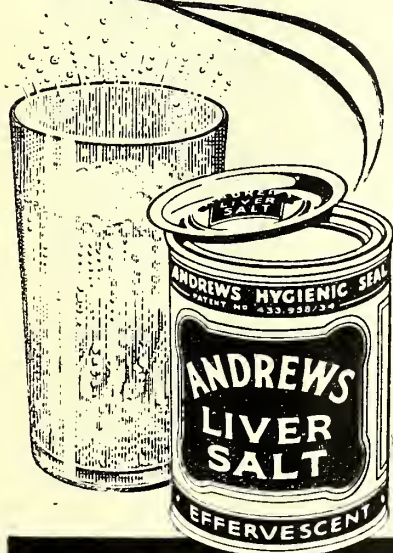
All you have to do is to maintain a good stock of Andrews' and to let your customers know you have it by strong window and counter displays. Then with an easy conscience you can spend your bonus.

This bonus offer of 12 tins to the gross is conditional upon a fortnight's display during April and May. Closing date of Bonus Offer, March 31st.

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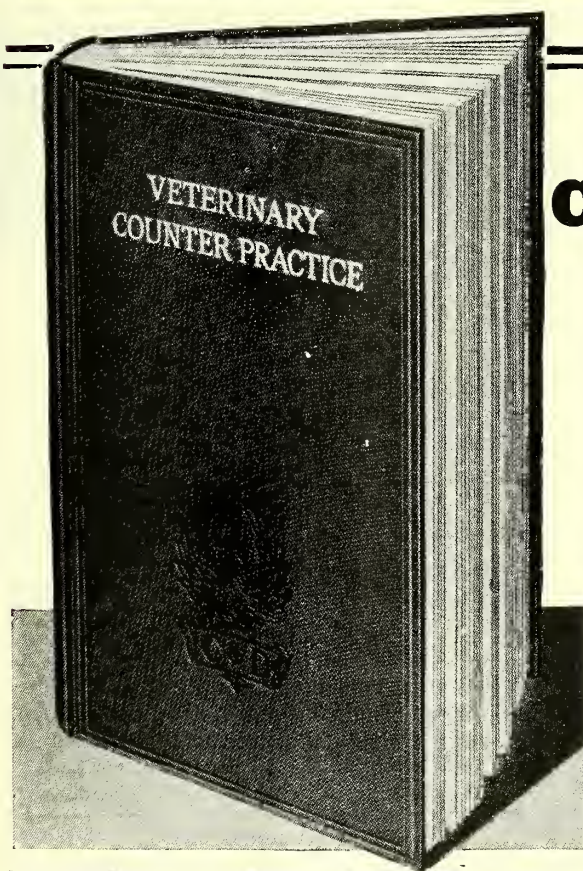
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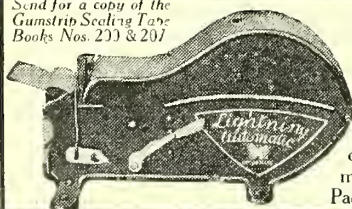
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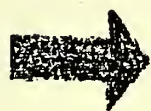
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Closing February 25th! For a few more days

75% — one bottle FREE with every half-dozen you order gives you **PROFIT ON OUTLAY**

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Pure fresh cod liver oil, complying with the requirements of the British Pharmacopoeia. P.A.T.A.
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How to get your bonus bottles

Just order in the usual way from your wholesaler, and you will get the extra *free* bottles in your parcel. This applies to all orders of three dozen or over. Remember you must order in half-dozen of the same kind, and you must promise to display the 'SevenSeaS' showcard on your counter or in the window for a fortnight. There's not a moment to lose! Take advantage of this bonus offer NOW — before it's too late.

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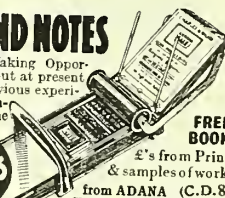
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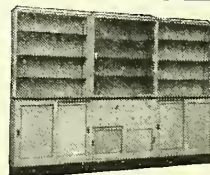
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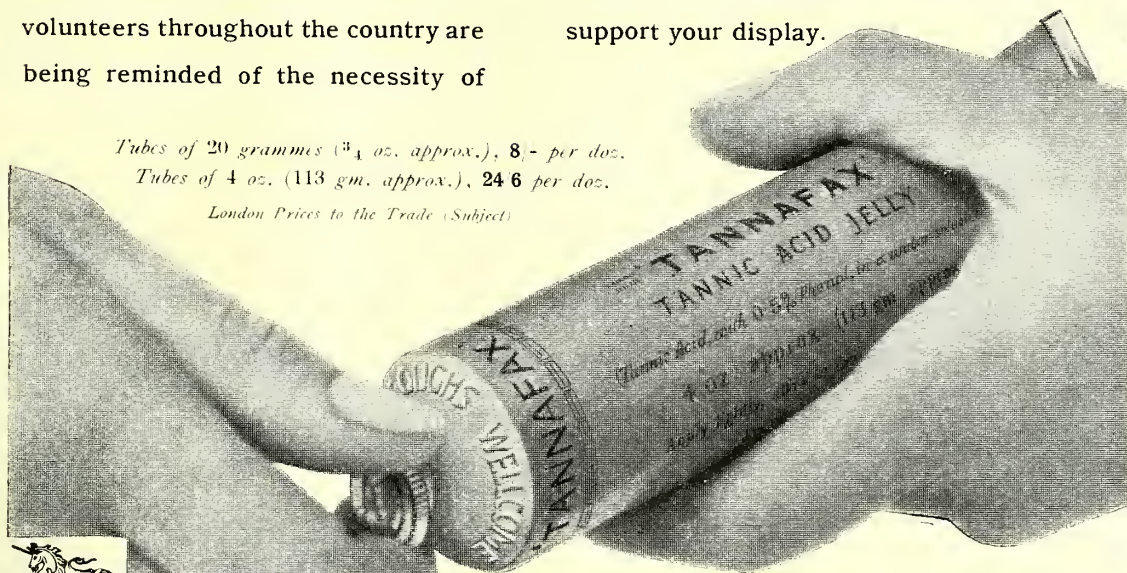
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News of the Week

Business Changes

YARDLEY & Co., chemists, Romford, have opened a branch at 7 Station Parade, Belmont Circle, Harrow.

MR. THOMAS C. COLLINS, M.P.S., has taken over the business of the late Mr. C. H. Belcher, M.P.S., 74 High Street, Caterham.

Key Industry Duty Notice

The Board of Trade have received an application under Section 10 (5) of the Finance Act, 1926, for an Order exempting dimethylamine from liability to duty under Part I of the Safeguarding of Industries Act, 1921. Any communication should be addressed to the Principal Assistant Secretary, Industries and Manufactures Department, Board of Trade, Great George Street, London, S.W.1, before March 14, 1939.

Proprietary Articles Trade Association

ADDITIONS TO PROTECTED LIST.—*Continental Laboratories, Ltd.*, Carovit, 80 tablets, 3s., 25s. doz., less 3½ per cent. cash in ten days or 2½ per cent. monthly account. *Evan Williams Co., Ltd.*, Evan Williams dandruff-remover shampoo, 6d., 4s. doz. *Pharmaceutical Specialities (May & Baker), Ltd.*, M. & B. 693 (Dagenan), twenty-five 0.50 gm. tablets, 7s. 6d., 60s. doz.; 100 0.50 gm. tablets, 28s., 18s. 8d. each.

ALTERATION.—*J. Tozeau Saunders Products (Distributors: Butler & Crispe, Ltd.)*, Ninona cold cream, 9d., 6s. 3d. doz.; three doz., 6s. doz.

POTTER & CLARKE, LTD.—We have been asked to cancel until further notice an announcement of alterations given under this heading in last week's issue, p. 139, and relating to bonus offers of Dr. Thompson's dandelion coffee essence and dandelion coffee.

Nursing Exhibition

The twenty-ninth annual Hospitals, Nursing, Midwifery and Public Health Exhibition organised by the "Nursing Mirror" opened at the Horticultural Hall, London, S.W.1, on February 13 for five days. The feature of this year's exhibition was a rheumatism display dealing with the classification, diagnosis and treatment of rheumatic diseases. Each day a number of lectures under a general subject was given by medical men, and films on nursing subjects were presented. Many drug-trade firms were represented at the stands, including ALLEN & HANBURYS, LTD., ANADIN, LTD., ANGIER CHEMICAL CO., LTD., ANGLO-AMERICAN PHARMACEUTICAL CO., LTD., ASPRO, LTD., BENDER'S FOOD, LTD., BENGUE & CO., LTD., BISODOL, LTD., BRITISH COD LIVER OIL PRODUCERS (HULL), LTD., BRITISH COLLOIDS, LTD., THE BRITISH DRUG HOUSES, LTD., BOVRIL, LTD., BROOKES & WARBURTON, LTD., CADBURY BROTHERS, LTD., CHESEBROUGH MANUFACTURING CO., CON., CONTINENTAL LABORATORIES, LTD., COW & GATE, LTD., DENVER CHEMICAL MANUFACTURING CO., DESITIN

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National Association of Women Pharmacists

ELECTION OF COMMITTEE.—Election of the committee of the Association takes place in April. Nominations of candidates, which must be in writing, signed by two members of the Association, should reach the secretary (Miss C. Mozley-Stark, The Dispensary, Lewisham Hospital, London, S.E.13), with the consent in writing of the candidate nominated, not later than March 1.

LECTURE ON NEW BUILDING.—The vice-president of the Pharmaceutical Society (Mr. W. Deacon) gave a lecture on "Pharmaceutical Headquarters and the Men Associated with Them" to members of the National Association of Women Pharmacists on February 9. There were many guests, among them Mr. and Mrs. W. S. Howells, Mr. and Mrs. J. C. Young, Mr. and Mrs. H. W. Wallis, Mr. H. Berry, Mr. E. T. Nethercoat, the president, Western Pharmacists' Association (Mr. H. C. E. Glover), and Mr. F. B. Royal (president, Guild of Public Pharmacists). The lecturer showed slides relating to John Bell, William Allen, John Savory and Jacob Bell, and to the buildings they met in—the Buffalo's Head, Bloomsbury Square; the Freemason's Tavern; the Globe Tavern, Fleet Street; and the Crown and Anchor, Strand, London. It was at the last-named that in 1841 a hundred pharmacists agreed to form an association for protecting the permanent interests of chemists and druggists, under the title of "The Pharmaceutical Society of Great Britain." The newly formed Society, under its first president (William Allen) advertised in "The Times" for a lecture room to accommodate one hundred persons. As a result 17 Bloomsbury Square was purchased, and from that day the house had not ceased undergoing adaptation. To-day, every inch of rooms and corridors was in use. In 1939 the new edifice that was to be erected, the school for 150 students, would be a model one, and the pharmacological department would be also included. Lastly Mr. Deacon explained how small donors could benefit the Society.

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Social Events

STAFF DANCE.—A dance arranged by the office staff of R. J. Reuter Co., Ltd., Slough, was held on February 10. Among the guests were the managing director (Mr. H. E. Cooper), Mrs. Cooper and representatives. Over 120 were present.

THEATRE NIGHT AT ROCHDALE.—The Rochdale Branch of the Pharmaceutical Society held its annual dinner and theatre night on February 7. The party numbered fifty-three, and, after dinner at the Flying Horse hotel, Rochdale, was transported by motor coach to the pantomime "Dick Whittington" at Manchester. An appeal in aid of the Society's Benevolent Fund, made by the social secretary (Mr. C. W. Barnett), realised about £2 10s.

LADIES' NIGHT AT MANCHESTER.—The Manchester Pharmaceutical Masonic Association held its second ladies' evening of the season on February 8, when guests were received by the chairman (Bro. J. E. Edwards) and Mrs. Edwards. Toasts of "The Chairman," "The Ladies" and "The Visitors" were proposed by Bros. R. Millner, J. Bridgford, and E. Walters, and replies were made by the chairman, Mrs. Edwards, and Bro. Turner. In a whist drive conducted by Bro. Hummel the following were prizewinners:—*Ladies*—1, Mrs. J. R. Lateward, 2, Miss H. Baggeley; 3, Mrs. Longmire; travelling prize, Mrs. E. Walters; lowest, Mrs. Bridgford. *Gentlemen*—Bros. Bridgford and Turner. After an interval for refreshments, dancing followed until midnight, Bro. Wild acting as M.C.

NOVELTY DANCES AT CROSBY.—The annual dance of the Crosby Pharmacists' Association was held on February 9, when more than 230 members and friends sat down to supper. Among the guests were the mayor and mayoress of Crosby; the chairman of the Liverpool Branch of the Pharmaceutical Society (Mr. J. Rae); the chairman of the Southport Branch (Mr. L. G. Meachim) and Mrs. Meachim; and the chairman of the Wallasey Branch (Mr. H. C. Tristram) and Mrs. Tristram. The president (Alderman J. Allen Jones) proposed "The Guests," which was replied to by the mayor. The mayoress drew for the prizes for menu-card numbers, and a bouquet was presented to her by Mrs. Allen Jones; Miss Sheila Fairbairn presenting a bouquet to Mrs. Allen Jones. Numerous "spot" prizes were given during dancing, and at intervals a professional dancing instructor and his assistant demonstrated novelty dances, which were then enthusiastically practised by the dancers. The M.C.s were Messrs. J. W. Fann and E. Horsfall. Picture on opposite page.

CROYDON MEMBER AS ENTERTAINER AT LOCAL DINNER.—The Croydon Branch of the Pharmaceutical Society and Croydon Pharmacists' Association held their annual dinner and dance on February 8, when about 120 attended. Before dinner the chairman of the Branch (Mr. O. H. Marshall) was invested with the new chairman's badge by Mr. F. G. Wells (a member of the Society's Council). The toast of "The Local Branch and Association" was proposed by Mr. F. G. Wells, who dealt with the new building, interspersing his remarks with anecdotes. The toast was responded to by the chairman. Mr. S. A. Noble proposed "The Visitors," coupling with it the name of Dr. S. A. Forbes (secretary, local branch, British Medical Association). During dinner the company was entertained by professional artistes and by a member of the Branch (Mr. H. B. Hammond) as himself and also in the guise of "Herr Brush." During the dancing which followed a draw in aid of the Society's Benevolent Fund realised £3 18s. 6d. Among the recipients of prizes were Miss Mayo and Messrs. Neve, jun., Spink & Bagley. Mr. Leal (Evans Sons Lescher & Webb, Ltd.), on behalf of the company, paid a tribute to the organisers. The M.C. for the dancing was Mr. A. W. Bennett.

Bradford

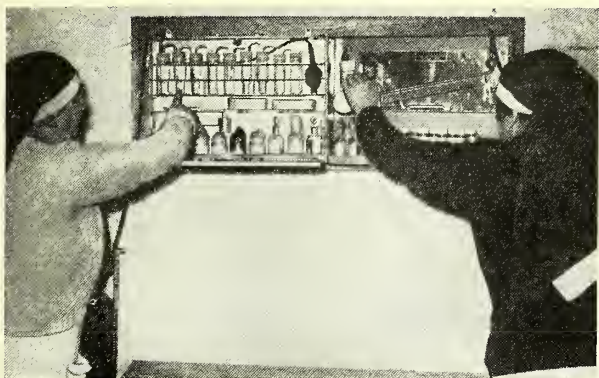
SIGNED C.F. UNDERTAKING URGED.—A meeting of the Bradford Branch of the National Pharmaceutical Union was addressed, recently, by Mr. T. Heseltine, Pontefract (a member of the Union Executive), Mr. J. W. Kitching presiding. Mr. Heseltine gave a general survey of the services offered by the N.P.U. He mentioned that the Executive handled between thirty and forty claims per month, and that all cases were settled out of Court if at all practicable. Mr. Heseltine explained the circumstances under which the Chemists' Friends' Association had been formed. Some people seemed to object, he said, to the presence of the wholesalers, but they had to

realise what the wholesalers could do in stopping or allowing C.F. lines to get through to wrong places. There had been complaints about small manufacturing or wholesale firms being taken into the scheme whilst certain big ones were still outside, but it must be remembered that little firms could become big ones. The retail chemist was not under compulsion to buy C.F. lines whether he required them or not. The chemist's part was to feature C.F. Lines and refrain from the display and recommendation of others. The idea had suddenly come into his mind that the N.P.U. might issue a letter to every qualified chemist in the country, asking for his signature to an undertaking not to feature display or push eligible lines which were not on the C.F. scheme, and warning him that if he did feature such lines he would not henceforth be able to get C.F. goods. It was only an idea, and he would like their views on it. Mr. Wood, Drighlington, said he felt the root of most of the difficulties was the proverbial apathy and laziness of the average chemist. Mr. Heseltine's idea about the signed undertaking seemed to him as one of the most constructive he had heard for some time, and he hoped it would go forward. Mr. F. C. Wilson said he also felt there were great possibilities in the idea. He drew attention to a tendency, since the signing of the new National Health Insurance contract, for a greater number of 16-oz. bottle prescriptions to be given. Most people brought two 8-oz. bottles, and as this involved double service by the chemist he wondered whether the N.P.U. Executive could do anything to check the tendency. He wondered whether the Executive to-day was adopting a policy of waiting for the supply trade to come on to the Chemists' Friends' list or going out after them?—Mr. Heseltine, replying, undertook to draw the Executive's attention to the prevalence of the 16-oz. prescription. He agreed to the desirability of Mr. Wilson's suggestion in regard to supply firms, and mentioned the coding system now about to begin on A and B firms. Manufacturers were taking up the coding idea enthusiastically, even at cost to themselves. He himself felt the N.P.U. might do more to bring in manufacturers to the C.F. scheme. Mr. Wm. Sutcliffe complimented Mr. Heseltine on his activity. He felt the Executive was entitled to gratitude for their work, particularly for getting full N.H.I. payments in 1938. Mr. W. T. Batley raised a question about N.P.U. plate-glass insurance; he found he could get cover at less cost privately. Mr. Heseltine promised to have the matter looked into at headquarters; but Messrs. A. T. Bailes and W. Brown testified to the benefit of the N.P.U. plate-glass insurance, both financially and in quick replacements. Mr. Brown approved Mr. Heseltine's suggestion of signed declarations and felt Bradford Branch should send a resolution at once recommending it to the notice of the Executive. Mr. Norman Best (secretary of the Pharmaceutical Society Branch) suggested the N.P.U. might usefully employ a travelling representative to call on chemists about twice a year on insurance and other matters. On the motion of Mr. Wood, seconded by Mr. Brown, the meeting unanimously agreed that a letter be sent from Bradford Branch asking the N.P.U. to consider the idea mentioned by Mr. Heseltine.

Carlisle

QUESTIONS TO SOCIETY'S SECRETARY.—A meeting of the East Cumberland Branch of the Pharmaceutical Society was held at Carlisle on February 6, thirty-four members being present. Introducing the speaker, Mr. H. N. Linstead, the chairman (Mr. J. Sharp, Ph.C.) said it was an honour to be visited by both the president and the secretary of the Society in the same year. Taking as his subject "Controversial Questions," Mr. Linstead dealt with legislation concerning proprietary medicines (composition and advertising); air-raid precautions; the National Service Register; the position of pharmaceutical assistants; the Society's new headquarters; and pharmacies as places for training apprentices. Commenting on Mr. Linstead's remarks, Mr. Sharp said he did not agree that pharmacy was well organised; he thought the Society ought to be able to take disciplinary action to prevent chemists taking on so many side-lines, such as wireless, tobacco, and so forth. The problem was being tackled at the wrong end, and pharmacy ought to be improved so as to offer the entrant something which would appeal to him. Regarding the building fund appeal, Mr. Sharp thought that it would be fairer to increase the retention fee; otherwise many who were in a position to subscribe would, through apathy, fail to do so. Mr. A. Priestman suggested that members should stretch their gift as far as possible—and then give it to the Benevolent Fund. Mr.

News in Pictures



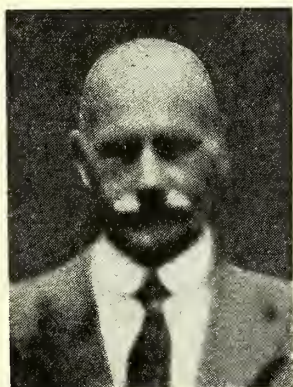
GAS DETECTION—Hospital wall-case of test chemicals and apparatus for detection of war gases.



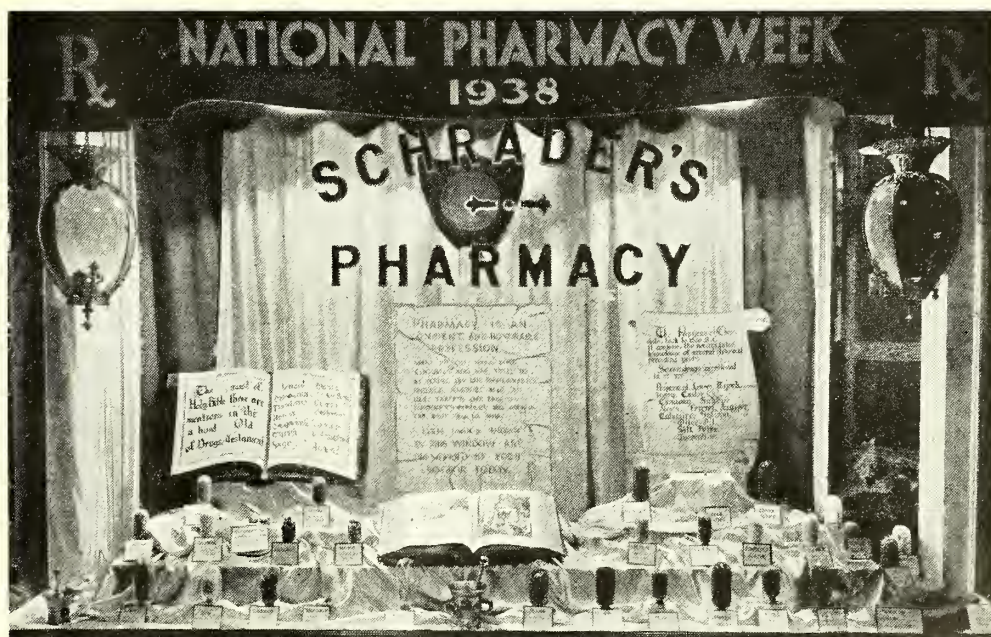
JUBILEE PRESENTATION—Mr. John Austen receiving case of cutlery from staff of G. T. W. Newsholme, Ltd., Sheffield (see p. 181).



CROSBY CHEMISTS' DANCE—Group at third annual dance of Crosby Pharmacists' Association (see opposite page).



MR. ARTHUR A. DECK, recently elected president, Cambridge Branch of the Pharmaceutical Society. Mr. Deck served his apprenticeship with Young & Postans, London, W.1. He qualified in 1884 and had further London experience before taking over the business at King's Parade, Cambridge, from which he retired in 1929.



U.S. PHARMACY WEEK PRIZEWINNING DISPLAY—Window display by H. L. Schrader, Baltimore, awarded first prize in competition organised by American Pharmaceutical Association. The theme is ancient drugs still used to-day, and illustrations are given from the Bible and from the Ebers papyrus.

Gavin remarked that in the twenty-four years since he had qualified he had met only one chemist who had made use of Bloomsbury Square; why not make those pay who made use of the headquarters? Mr. Linstead pointed out the many ways in which the activities at headquarters helped chemists all over the country. Mr. Taylor asked for information regarding co-operative societies having drug stores without qualified managers. Mr. Linstead explained that this question was under negotiation between the Society, the Home Office, and the co-operative societies at the present time. Mr. Gavin inquired about the rates of pay for chemists who might be employed by the Government in war-time. Mr. Linstead said that ordinary civil rates of pay would probably operate. Mr. Priestman reported difficulty with farmers owing to inability to sell strychnine. The speaker pointed out that the Ministry of Agriculture had not received any complaints from farmers, and suggested the use of arsenic or thallium acetate instead. Mr. Winthrop suggested that the Society should publish a list of new Schedule 4 poisons coming on the market, and Mr. Hall suggested that manufacturers should mark their products. Mr. T. M. Ridley proposed a vote of thanks to Mr. Linstead and spoke of the difficulty experienced in small towns where there were no facilities for study for the Preliminary Scientific examination. He thought it would be better to take both examinations together, either before or after apprenticeship.

Middlesbrough

RESOLUTIONS TO N.P.U. HEADQUARTERS.—A meeting of the Middlesbrough Pharmacists' Association was held on January 24, Mr. P. Gillespie presiding. Matters discussed included local advertising; the policy of certain firms in reducing the price of their products to the public while increasing them to the retailer; and the selling of medicines by grocers. Mr. Gray (local secretary, National Pharmaceutical Union) said that, with the secretary of the Tees-side Branch, he had interviewed the advertising manager of the "North-Eastern Gazette," and as a result he was able to put before the meeting concrete proposals that the Association should associate itself with reader advertisements that would aim at educating the public on the subject of pharmacists' qualification. To ensure success of the scheme, fifty subscribers would be required to commence with. The advertisement would occupy $4\frac{1}{2}$ column-inches weekly, and the cost would be approximately 1s. 3d. per member per week. Should greater numbers support the scheme, the cost could be lessened or the series extended. Much discussion took place, and it was decided that members should limit themselves to 10s. per quarter, but before adopting the scheme outlined should obtain further support, which, it is understood, there is every possibility of securing. Further discussion took place on the subject of prices of proprietaries, and members protested at the attitude of firms in not accommodating retailers when revision of retail prices took effect. It was decided to forward the following resolution to the N.P.U.:—"That this Association views with grave concern the attitude adopted by certain firms in reducing their prices to the public but advancing them to the retailer." A letter from the N.P.U. co-ordinating officer entitled "A Good Resolution," in which he called for greater co-operation, was then read. Several matters of principle arose in the discussion on medicine sales by grocers, and evidence was given of intensified competition. It was unanimously decided to forward the following resolution to the N.P.U.:—"That, when a candidate seeks election either to the N.P.U. Executive or to the Pharmaceutical Society's Council, and such member pursues a business policy which, in the opinion of the N.P.U. Executive, is detrimental to the interests of pharmacists and inimical to the principles of the Chemists' Friends scheme, it should be the business of the N.P.U. to safeguard its own interests, and those of its members, by acquainting members of all relevant facts."

Preston

N.P.U. ACTIVITIES OUTLINED.—A joint meeting of the Preston Branch of the National Pharmaceutical Union and the local Pharmacists' Association held on February 7, was addressed by Mr. W. J. Tristram, Liverpool (a member of the N.P.U. Executive). Mr. Tristram outlined the activities of the Union and explained difficulties that had arisen through the Pharmacy and Poisons Act, 1933, particularly in connexion with the defence of pharmacists prosecuted by the Society. He gave the reasons for accepting the discounting clause

in the National Health Insurance contracts, and showed how much better that had been than the alternative of a definite reduction in the fees. The executive continually kept before it the fact that this remuneration, even without discounting, was far from adequate. A number of pharmacists who came from Blackburn took part in the discussion that followed.

Miscellaneous

BRITISH STANDARDS INSTITUTION.—British Standard Specifications for Paint Materials (B.S. Nos. 282, 388 and 390) have recently been issued, and with their issue the work of revising the series (paint materials) is now complete. The standards now issued are for lead chromes; aluminium powder and paste; and oil pastes. Copies may be obtained from the Institution at 28 Victoria Street, London, S.W.1, price 2s. 2d. each post free.

A.R.P. INFORMATION BUREAUX.—Ten information bureaux in connexion with the local air-raid precautions scheme have been set up in Bristol. Among them are the following pharmacies or pharmaceutical businesses:—Victor Latty, Ltd., Temple Gate; A. G. E. Foster, 42 Redcliffe Hill; Spracketts', 5 Broad Quay; W. E. Partridge, 22 Small Street; Hodders, Ltd., 47 High Street. The remaining bureaux are at cafés and tobacconists' shops.

ISLE OF MAN SUNDAY TRADING.—An attempt is being made in the Manx House of Keys to secure an alteration in the existing Shop Hours Act, so that various commodities may legally be sold between certain hours on Sundays during the summer visiting season (i.e. from Whit-Sunday to September 30). At the present time chemists may open for certain hours on Sundays during the winter but in summer for the whole day for the sale of medicines and drugs. In spite of the Act many shopkeepers engage in Sunday trading throughout the season. An amending Bill has passed its second reading. While it was in Committee the position of chemists under the Bill, particularly in relation to the sale of photographic films, was clarified, and it is provided that photographic films may only be sold up to 1 p.m. on Sundays. The introducers urged that films should be included in the articles which might be sold all day.

NON-POLITICAL EMPLOYEES.—A meeting of the National Pharmaceutical Employees' Association was held at 17 Bloomsbury Square, London, W.C.1, on January 31, Mr. W. Atkinson in the chair. Mr. H. M. Hirst (a member of the Pharmaceutical Society's Council) addressed the meeting. He said he had been an employee most of his life, and related from his own experience the improvement that had taken place in pharmacy. The main difficulty to-day was the existence of too many shops. The preponderance of big companies' apprentices, had led to scarcity of private-trained chemists. Lowness of salaries, he thought, was due to low takings in most shops. Too often parents put their son into a shop as soon as he had qualified. Asked if he thought an employees' organisation would ever succeed, he said he could only speak about his own experience; he had started one in Scarborough which lasted five years. The difficulties were collection of subscriptions and migrations of members. Mr. James asked if non-political organisations were better than political. Mr. Hirst said he preferred non-political every time. Mr. Summerfield asked if it would not be better for the Society to hand back its Charter and become a Government department. The speaker replied that he disliked officialdom. The chairman asked if the Society would ever have an examination for assistants. Mr. Hirst favoured the idea, but would make the minimum age thirty. Mr. Summerfield proposed a vote of thanks, which Mr. Murgatroyd seconded. He agreed conditions were better, but there was a long way to go. An association could protect from unscrupulous employers.

COMPLIMENTARY DINNER.—At the termination of his year of office as president of the Proprietary Articles Trade Association, a complimentary dinner was given by a number of personal friends of Mr. George M. Garcia in appreciation of his services to the P.A.T.A., to the Proprietary Association, and to the trade as a whole. The dinner was held at the Langham Hotel, London, W.1, on February 7, Mr. F. J. Smith presiding. The committee responsible for arranging the dinner, Messrs. F. J. Smith, C. H. Ratcliffe, T. Marns and J. A. Kenningham (secretary), had intimated that appreciation would be expressed most acceptably to Mr. Garcia by supplementing his efforts on behalf of the Lord Baldwin Refugee Fund rather than by presenting him with any personal memento of the

occasion. Mr. F. J. Smith, proposing "Our Guests," said Mr. Garcia had done great work for the trade and his interest in the Lord Baldwin Refugee Fund was well known; Mr. Garcia's friends had subscribed the sum of £177 10s. to this fund, and Mr. Smith handed to Mr. Garcia a cheque for this amount. The toast was supported by Mr. Marns and by several other speakers. Mr. Garcia expressed his appreciation of the honour done him. He intimated that it was hoped the sum subscribed and handed to him that night would be applied to assisting the widow of Professor Ehrlich, who had done so much for humanity.

Welsh Notes

Aberdare

OFFICERS ELECTED.—The annual meeting of the Aberdare Branch of the Pharmaceutical Society was held at Aberdare on February 8. The president extended a welcome to the two new members of the branch (Messrs. W. Nicholas and H. C. Thomas) and congratulated the secretary on his election as president of the Aberdare Chamber of Trade. The secretary then reported that two of the three proposals submitted to the Council of the Society for discussion at the Birmingham Conference had been accepted. It was unanimously resolved to support the Sir William Glyn-Jones Memorial Appeal Fund and to make a special effort in the branch area in view of Sir William's close association with Aberdare in his younger days. The audited statement of accounts was read and passed; this showed a good balance in hand. The following were elected officers for the ensuing year:—*President*, Mr. H. Parry, Nelson; *Vice-President*, Mr. H. Noel Thomas, Aberdare; *Treasurer*, Mr. A. B. Andrews, Aberdare; *Auditors*, Messrs. D. Rees and J. Enos Jones; *Secretary*, Mr. H. Noel Thomas, Aberdare. The meeting closed with a vote of thanks to the retiring officers.

Pontypridd

PONTYPRIDD'S INTEREST IN THE "WELSH ROOM."—The Pontypridd and Rhondda Branch of the Pharmaceutical Society held their fifth annual dinner-dance at Pontypridd on February 9 under the presidency of Mr. T. E. Evans, Ph.C., Ferndale. The guests included Mr. G. R. Knox Mawer (a member of the Society's Council) and Mr. W. L. Way, Bristol. Proposing "The Pharmaceutical Society," Mr. Evans spoke of pharmacy as being one of the oldest professions, and instanced a copy of a prescription in the British Museum, written in 3,700 B.C. The "Welsh room" in the Society's new building was mentioned as being of local interest, in that it was to be a memorial to the late Sir William Glyn Jones, an Aberdare apprentice who later became the most prominent pharmaceutical statesman of his time. Mr. Knox Mawer responded in a short and appropriate speech, hoping that local members would assist the Welsh appeal fund. Mr. E. T. Pritchard, Pontypridd, proposed "The Visitors and Ladies"; Mr. W. L. Way responded, thanking the Branch for its invitation. Dancing followed. A collection in aid of the Society's Benevolent Fund realised £2 13s.

Irish Notes

Pharmaceutical Society of Ireland

The monthly meeting of the Council of the Pharmaceutical Society of Ireland was held at 67 Lower Mount Street, Dublin, on Tuesday, February 14, Mr. P. C. Cahill (vice-president) in the chair. Other members of the Council present were Messrs. F. J. Fitzpatrick, J. F. Costello, D. W. P. Boyd, P. A. Brady, P. Brooke-Kelly, J. Duggan, J. Gleeson, B. P. Hickey, M. J. Kieran, Dr. J. A. Mitchell, J. V. McKeever, J. A. O'Rourke, M. J. Parkes, T. C. Scott, J. K. Whelehan, and Miss F. M. Flood.

THE VICE-PRESIDENT: I have to refer to the death of Mr. J. T. Dwyer, who was up to a short time ago a member of this Council. He was an old and esteemed colleague, and, as most of us here know, he did very good work on this Council. I beg to move: "That the registrar be instructed to convey to the family of our late colleague, Mr. J. T. Dwyer, the deepest sympathy of the Council of the Pharmaceutical Society of Ireland, on his death."

Mr. FITZPATRICK seconded, and the motion was passed in silence.

THE VICE-PRESIDENT then moved: "That the registrar be instructed to convey to our colleague, Mr. C. J. Cremen, the deepest sympathy of the Council of the Pharmaceutical Society of Ireland, on the death of his father."

Mr. FITZPATRICK seconded, and the motion was passed in silence.

THE VICE-PRESIDENT next moved: "That the registrar be instructed to convey to His Excellency the Nuncio Apostolic, and to His Grace the Archbishop of Dublin, the deepest sympathy of the Council of the Pharmaceutical Society of Ireland on the death of His Holiness Pope Pius XI, and that this meeting do now adjourn."

Mr. FITZPATRICK seconded, and the motion having been passed in silence the Council adjourned.

Irish Drug Association

For the third year in succession Mr. Philip A. Brady has been elected *President* of the Irish Drug Association. Mr. Brady's re-election took place at a recent committee meeting of the Association on the motion of Mr. T. C. Scott, seconded by Mr. G. A. McLean Lee. Mr. R. B. Brown was re-elected *Vice-President* and Mr. McLean Lee re-elected *Treasurer*. Discussion followed on the practice of manufacturers who circulate trade prices, bonus offers, or special terms on printed cards through the open post; this was condemned by the committee. As it often happens that post office duties in rural Ireland are conducted by general traders, the committee considered such trade announcements should be circulated in envelopes. It was decided to make protest when necessary.

Ulster Chemists' Association

The monthly meeting of the executive committee of the Ulster Chemists' Association was held on February 7, Mr. E. A. Richey (president) in the chair. There were also present Messrs. J. Adams, J. Dundee, T. A. Gibson, R. Gibson, R. Linehan, John McDowell, R. A. McEwen, P. R. W. Shinner, A. Steede, and W. C. Tate. In order to expedite completion and return of the Air-Raid Precautions classes enrolment forms, it was decided that a letter should be sent to each interested member pointing out the urgency of this matter and requesting the immediate return of the completed form. The subcommittee appointed to confer with the Pharmaceutical Society of Northern Ireland reported that arrangements had been made to hold a social function in the Grand Central Hotel, Belfast, on March 16. Members will be advised of details. The secretary reported that, as directed, he had sent a letter of protest to two manufacturers regarding the change in price of their dentifrices. One did not reply and the reply from the other was considered most unsatisfactory. The committee agreed that, the protest having been made, no useful purpose would be served by continuing the correspondence. Mr. Cavan (advertising expert) attended and submitted two draft advertisements that were approved for insertion in the Press. The possibility of having Northern Ireland included in the scope of the Chemists' Friends movement was fully discussed, and eventually the following resolution was unanimously adopted on the motion of Mr. Dundee, seconded by Mr. John McDowell:—"That the National Pharmaceutical Union be requested to extend the Chemists' Friends movement to include Northern Ireland, and the president and secretary of the Ulster Chemists' Association be empowered to complete the necessary details required to give effect to this resolution." The secretary was instructed to forward the resolution to the N.P.U. for consideration. It was unanimously agreed to write to the secretary of the Shop Hours Act Committee expressing appreciation of the report now issued, which included the recommendations of the U.C.A., and expressing the hope that an Act of Parliament embodying these recommendations would be passed and brought into operation in the near future. Some price alterations having been approved and accounts passed for payment, the meeting ended.

Miscellaneous

BUSINESS CHANGE.—Butler's Medical Hall, Ltd., have removed from 40 Mary Street, Dublin, to 23 Mary Street.

PHOTOGRAPHIC DEALERS' EXHIBITION.—The Dublin Branch of the Photographic Dealers' Association has arranged for the Association's "Pride of Craft" exhibition from London to be shown in its entirety at Mill's Hall, Merrion Row, Dublin, on February 22 and 23. Chemist photo-dealers are asked to co-operate by bringing the exhibition, which is open to the public on both days, to the notice of their customers.

VISIT TO LOURDES.—Following the visits of groups of Irish pharmacists to Lourdes in 1937 and 1938, it has been arranged to organise a similar group this year. The party will leave Dublin on August 1, arriving in Lourdes on August 2. It will leave for home on August 16, arriving in Dublin on the evening of the following day. The cost will be approximately £13. Full particulars can be obtained from any member of the organising committee, which consists of Messrs. T. J. Burke, B.A., M.P.S.I., Medical Hall, Cavan; P. Fullam, M.P.S.I., Medical Hall, Naas; James J. Kerr, P.C., M.P.S.I., 67 Lower Mount Street, Dublin; James A. O'Rourke, M.C.P.S.I., 97 Lower George's Street, Dun Laoghaire; and T. B. O'Sullivan, 39 Rathdown Road, North Circular Road, Dublin.

Scottish Notes

Glasgow

P.D.A. LECTURE.—Members of the Glasgow and West of Scotland Branch of the Photographic Dealers' Association met in Reid's Tea Rooms, Gordon Street, Glasgow, on February 9, to hear a lecture by Mr. G. B. Kearay on "How to Make Good Negatives and Prints." Mr. Kearay said that cameras were like fountain-pens. The same pen with the same ink and paper would give different results with each user. In the same way photographs bear the mark of workmanship of the photographer, even using the same camera and the same sensitised material. Beginners in the art should aim to give their work their own distinctive personality. The best way to learn was to rub shoulders with good photographers; dealers' assistants had splendid opportunities of making such contacts, and to join a photographic society where more advanced workers were always willing to give the benefit of their experience to others. Correct time of exposure is of primary importance, and it is wise to use an exposure meter. Mr. Kearay gave it as his experience that for the type

of negative he liked the time given by the exposure meter could be safely doubled without danger of over-exposure. In tank development by time it was better to be slightly under than over the time indicated. In making enlargements the usual fault is over-exposure. It is wise to make several trial exposures on strips of a good size on each negative. Dull prints can be brightened by a coating of copal varnish or one of the linseed oil "dopes." It is important to watch the temperature of developing solutions, and the effect of using a developer too hot was well illustrated by a red-stained specimen print. Mr. Kearay concluded his lecture by projecting a selection of hand-coloured lantern slides.

LECTURE ON PHARMACOLOGY.—The monthly meeting of the Glasgow and South-Western Scottish Branch of the Pharmaceutical Society was held on February 8 in the Gordon Restaurant, Glasgow, Mr. J. H. Ramsay, Ph.C., chairman of the branch, presiding, when a lecture, illustrated by slides, was given on "Standardisation of Drugs—Some Recent Pharmacological Advances," by Dr. F. J. Dyer.

Dr. Dyer described the work of the Society's laboratories in London. He said that since the department was established ten years ago some 2,000 specimens of preparations of drugs which were formerly almost impossible to assay had been submitted to the pharmacological laboratories for examination. Dr. Dyer described experiments that had been made with heparin, isolated from the liver which is successfully used to prevent the clotting of blood. A method for its production synthetically has recently been discovered. The immediate clinical use is to "heparinise" blood donors and to keep drawn blood fluid.

Dr. Dyer gave a brief account of recent discoveries associated with the treatment of Addison's disease, which is now capable of successful treatment by extracts prepared from the glands of freshly slaughtered sheep and oxen. A short time ago chemists prepared synthetic substances possessing properties similar to those of the natural extract, thus bringing the treatment of the disease within reach of a wider range of patients.

Topical Reflections

By Xrayer

War Risks and Proposals

The tentative Government proposals regarding war risks, lucidly summarised in your editorial article on p. 153 of last week's issue, fail to satisfy the average inquirer. We may accept the position that "no possible basis for an actuarial calculation exists," and that the alternative suggestions of his Majesty's Government "were, of necessity at this stage, revealed in somewhat indefinite terms"; but that is not all we need to know. I see, for instance, no mention of the highly important question of premises, unless these are comprised under the term "properties," mentioned almost casually in association with goods. All chemists in business are of necessity interested in the security of the building or buildings in which their occupation is carried on, whether they are owners or lessees. We have seen in the daily Press certain general statements as to the official assessment of damage that may occur during air raids, with shadowy promises of compensation, not in full but up to an unspecified percentage. In the event of such damage a claim should, obviously, cover loss of business as well as demolition of fabric. What is being done in this matter? Are we to wait till an emergency arises, only to be told then that the Government has more urgent problems to attend to? I need not underline your exposition of the handicap to overseas trade. Such bodies as the National Chamber of Commerce may with advantage review the situation as a whole and make representations.

Pharmacists in a National Relationship

The first sentence of my preceding paragraph may be applied, in substance, to the statement issued by the Pharmaceutical Society (p. 147) regarding the National Register of Pharmacists, a statement which, as I read it, bears evidence of hasty preparation. When I see the form that is being sent out, I shall be in a better position to appraise its strong points, whatever they may be; meanwhile I may register a hope that the status of pharmacists, as distinguished from that of unqualified persons who may be employed in pharmacies, will be

adequately recognised in any work of national scope they undertake. I may perhaps remind your readers of what was written in this section a week ago on the admission of apothecaries' assistants to the Register of Chemists and Druggists. In a national emergency there will be a certain number of pharmacists whose "other obligations" prevent them from offering service of any kind. But on the other hand there is, I am convinced, a reserve of qualified people, not large, perhaps, in relation to population figures, yet considerable in its power of easing situations for hard-pressed pharmacists in shops, hospitals and so forth. Some of these people do occasional locum work; others get no further than the local bowling green. I suggest that their natural outlets for valuable help may be found by getting into touch with the secretary of the nearest chemists' association.

Hire-Purchase

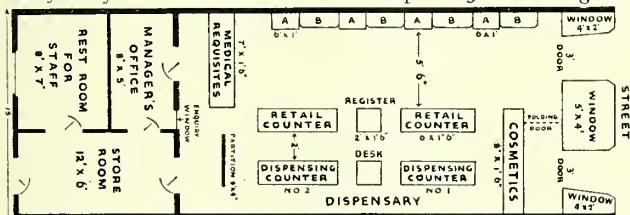
We have to thank you for calling attention (p. 157) to the new Hire Purchase Act, the existence of which I confess I had overlooked. Desirable as it is on general grounds to be able to purchase outright all that we need in business, there may come occasions when a sudden call for some fitting or piece of apparatus justifies hire-purchase. I have seen enough of such transactions to be aware that hitherto the scales have been heavily loaded in favour of the supplier, and that the advice of an experienced solicitor has sometimes been necessary in order to unravel the tangle created by the verbose provisions of a hire-purchase agreement. The "prohibited clauses" specified in your article are of great importance to a purchaser, and in particular I may mention the latter half of the second clause, dealing with the imposition of additional liability on him. It is not difficult to foresee that a good deal of ingenuity may be exercised, on the part of some vendors, in attempts to nullify the effect of this provision—for example, by putting forward collateral or supplementary documents purporting to be of equal validity with the principal agreement. The old "caveat emptor" is fully applicable here.

Imperial and Foreign News

Australia

APPEAL FUND.—An appeal has been made to Australian pharmacists, assistants and apprentices to contribute towards a £1,000 fund for a campaign to secure legislation by which the position of independent pharmacists can be made secure.

PHARMACY DESIGN PRIZE.—Mr. A. H. Leahy, M.P.S. (N.S.W.), West Maitland, won a prize in a recent competition for a design for a modern pharmacy. The following is Mr. Leahy's layout for a double-fronted shop of 15-ft. frontage:—



PRIZEWINNING DESIGN FOR PHARMACY LAYOUT
A = Showcase; B = Seat

It will be noted that the cosmetic department, which is adapted to rapid sales, can be closed at times when medicinal products only are allowed to be sold. An innovation is the placing of the dispensing counter immediately behind the serving counter.

Greece

ANTI-MALARIAL PREPARATIONS.—Import, manufacture, advertising and sale in Greece of anti-malarial proprietary medicines are regulated by a new emergency law which makes such preparations subject to the general legislation applicable to proprietary medicines. To be granted a sales licence a preparation must possess, in the opinion of the Supreme Board of Health, special properties rendering it more effective than the quinine salts and preparations made by the State Monopoly for the treatment of malaria. All existing licences for such preparations are to be re-examined by the Supreme Board of Health and are to be revoked if the requirements of the new law are not met, but a period of one year is granted for the consumption of existing stocks. In this re-examination the Board will consider both chemical composition and literature.

Italy

ROME EXHIBITION.—The Department of Overseas Trade announces that the United Kingdom Government has accepted the invitation of the Italian Government to participate in the Rome Universal Exhibition, 1942.

MILAN SAMPLE FAIR.—The annual Sample Fair, Milan, will be held from April 12 to April 27. As usual, special travel facilities will be available, and a number of functions and events have been arranged to coincide with the Fair. The chemical and pharmaceutical pavilion this year has an area of 1,150 square metres; some ninety firms, mostly Italian, are exhibiting in the Perfumery Palace. Further information may be obtained from the organisers, Via Domodossola, Milan, Italy, or from the Italian Chamber of Commerce in London.

Nicaragua

CONTROL OF MEDICAL SAMPLES.—A circular issued by the Nicaraguan Director-General of Public Health requires pharmaceutical samples sent to Nicaragua for free distribution among physicians, dentists, etc., to be sent to the office of the Director-General, together with a list of the professional men to whom they are to be distributed. In addition to taking over control of the distribution of pharmaceutical samples, the Director-General's office has established penalties for sale of such samples by pharmaceutical establishments.

Panama

RESTRICTIONS AGAINST ALIEN PHARMACISTS.—The National Assembly of Panama recently passed a law restricting the practice of certain professions, including pharmacy, to that country's citizens who possess degrees ratified by the National Council of Hygiene. For pharmacy the qualification recognised is that of the National Council of Pharmacy. Foreigners active in any of the affected professions and possessing permits issued before the law was passed are exempt from the restrictions.

Trade-Mark Applications

The figures in parentheses refer to the classes in which the marks are grouped. A list of classes and particulars as to registration are given in "The Chemist and Druggist Diary and Year-Book," 1939, p. 342.

(From "The Trade Marks Journal," January 25, 1939)

SCHEDULE III

- "KARWENDOL"; for agricultural and veterinary chemicals, etc. (2). By Karwendel Gesellschaft Nachf. Rentschler & Cie, 16 Adolf Hitler Strasse, Laupheim, Germany. 585,191.
- "CALAVO"; for essential oils and perfumery (4) (48). By Calavo Growers of California, 4803 Everett Avenue, Los Angeles, U.S.A. 572,629/573,559. (Associated.)
- "PERFUME ALI BABA" over illustration of Ali Baba with word "DRALLE" ("Dralle" disclaimed); for perfumery (48). By Georg Dralle, 16 Präsident Krahm, Hamburg, Germany. 586,719.
- "AUREOL"; for hair dyes (48). By Schwarzkose Sohne, Dreysestrasse 5, Berlin N.W.21, Germany. 585,848.

SCHEDULE IV

- "KELARENA"; for fertilisers (1). By The Kelarena Products Co., 8 North Gardner Street, Glasgow. 603,251.
- "TULISAN"; for agricultural and horticultural chemicals (1). By British Dyestuffs Corporation, Ltd., Imperial Chemical House, Millbank, London, S.W.1. 603,415.
- "MARVEX"; for hair-setting lotions and face creams (3). By Henry Serventi, Ltd., 61 Beak Street, London, W.1. B601,481. (Associated.)
- "AMODO"; for preparations for removing enamel from the nails (3). By International Options, Ltd., 19 Charing Cross Road, London, W.C.2. 602,544.
- "RINOLETTE"; for hair lotions (3). By B. N. Furman (Productions), Ltd., 565 Green Lanes, London, N.8. 603,379.
- "CLARILOID"; for soaps, detergents, etc. (3). By Clare's Textiles, Ltd., Town Hall Buildings, Wells, Somerset. 603,468.
- "SANTANO"; for menstruation underclothes (5). By M. Field, 4 Angel House, Pentonville Road, London, N.1. 601,630.
- "LUTOCYLAN"; for pharmaceutical, veterinary and sanitary substances (5). By Society of Chemical Industry in Basle, 141 Klybeckstrasse, Basle, Switzerland. 601,210. (Associated.)
- "LIBERTIX"; for menstruation appliances and surgical dressings (5). By T. J. Smith & Nephew, Ltd., Neptune Street, Hull. 602,295.
- "KAL-FEX"; for stomach powders (5). By James Hilton Rogers, 83 Plymouth Road, Penarth, Glam. 602,383.
- "ASMIDAR" on label design; for pharmaceutical preparations (5). By C-F.Z.P.H. "Asmidar," Warszawa, Grzybowska, Warsaw, Poland. 602,005.
- "THROATIES" over arrow with words "STRAIGHT TO THE SPOT" (words "Throaties" and "Straight to the Spot" disclaimed); for throat and chest pastilles (5). By Ernest Jackson & Co., Ltd., 29 High Street, Crediton, Devon. B602,290.
- "EROL"; on label design; for a preparation for indigestion, etc. (5). By Findlays (Proprietaries), Ltd., 6 St. Patrick Street, Edinburgh. 602,507.
- "KILOSA"; for menstruation appliances (5). By Les Successeurs de Moch et Dame Coullaud, 32 rue des Archives, Paris, France. 602,687.
- "DOCA"; for medicinal chemicals, excluding preparations for colds and coughs (5). By Leo F. van Zwanenberg, 77 Newman Street, London, W.1. 602,758.
- "DOLVIC"; for medicinal preparations, etc. (5). By Chelsea Bio-Products, 50A Cambridge Street, London, S.W.1. 603,347.
- "SCOPHEDAL"; for pharmaceutical substances, etc. (5). By E. Merck, Frankfurterstrasse 250, Darmstadt, Germany. 603,088.
- "AVORLAB"; for veterinary preparations (5). By Laboratoire d'Isotérapie Appliquée, 135 Avenue de Neuilly, Neuilly-sur-Seine, France. 603,322.
- "ALLODENE"; for pharmaceutical preparations (5). By W. J. Bush & Co., Ltd., 28 Ash Grove, London, E.8. 603,392. (Associated.)
- "PERMIRON"; for water-purifying and softening plant, etc. (11). By The Permutit Co., Ltd., Gunnersbury Avenue, London, W.4. 602,161. (Associated.)

SPECIFICATION AMENDMENT

The specification for "HEB" in Class 3, No. 587,086, by J. Halden & Co., Ltd., has been amended to "Chemical substances prepared for use in medicine and pharmacy, but not including soap."

Company News

P.C. means Private Company and R.O. Registered Office

FRED BRIGGS, LTD. (P.C.).—Capital £2,000. Objects: To carry on the business of manufacturers of and dealers in chemicals, etc. Fdk. Briggs, 32 Longshaw Lane, Blackburn, director.

BROWN CHEMISTS (NORTHERN), LTD. (P.C.).—Capital £1,000. Objects: To carry on the business of chemists, druggists, oil and colour men, opticians, etc. Leslie L. Brown, C.A., "Cauldwell," Runnymede Road, Ponteland, director.

SMIT-ASH, LTD. (P.C.).—Capital £2,000. Objects: To carry on the business of manufacturers of and dealers in chemicals and other products, etc. Wm. Ashworth, 220 Burnley Road, Accrington, director. R.O.: 9 Cannon Street, Accrington.

DEVONSHIRE DRUG CO., LTD. (P.C.).—Capital £5,000. Objects: To carry on the business of manufacturers of and dealers in drugs, medicines, proprietary articles, photographic apparatus and materials, etc. The first directors are to be appointed. R.O.: 202 Bishopsgate, E.C.2.

HERBS AND DRUGS, LTD. (P.C.).—Capital £1,000. Objects: To carry on the business of dealers in drugs, herbs, essential oils, perfumes, chemicals, medicines, etc. Dr. Jean Souchet, 174 Lansdowne Road, Tottenham, N.17, director. R.O.: 602 Bank Chambers, 329 High Holborn, W.C.1.

GRAFTON LABORATORIES, LTD. (P.C.).—Registered in the Straits Settlements. Capital \$200,000. Objects: To carry on the business of Grafton Laboratories, Singapore, manufacturing and wholesale chemists and druggists. Mr. Geo. W. Crawford, managing director. R.O.: 20B Collyer Quay, Singapore.

COLLINS CASH CHEMISTS, LTD. (P.C.).—Capital £1,500. Objects: To acquire the business of a pharmacist, chemist, druggist, photographer, etc., until recently carried on by the late C. H. Belcher at Caterham-on-the-Hill, Surrey, and elsewhere. R.O.: 74 High Street, Caterham-on-the-Hill, Surrey.

KEEN PRODUCTS, LTD. (P.C.).—Capital £1,000. Objects: To carry on the business of manufacturers of and dealers in creams, salves, ointments, perfumes, powders, cosmetics, toilet and medical requisites, etc. Joseph H. Bamberger, The Dower House, Stanmore, director. Solicitors: Brandon & Nicholson, Suffolk Place, Pall Mall, S.W.1.

PROCESS DEVELOPMENT LABORATORY, LTD. (P.C.).—Capital £1,050. Objects: To act as consultants to any industry; to acquire and develop processes and letters patent, and to carry on the business of manufacturers of and dealers in chemicals and disinfectants, etc. Directors to be appointed by subscribers. R.O.: 23 Tynham Road, S.W.11.

SOUTHALLS (BIRMINGHAM), LTD.—The directors recommend a final dividend of 15 per cent., tax free, making 25 per cent., tax free, for the year. Last year the dividend payments totalled 20 per cent., and a special distribution of 5 per cent. from sale of investments was paid.

YARDLEY & Co., LTD.—The directors announce a final dividend of 35 per cent. on the ordinary shares for 1938, making a total of 50 per cent. for the year. In the previous financial year a final dividend of 22½ per cent. and a bonus of 17½ per cent. brought the year's total to 55 per cent.

MONSANTO CHEMICALS, LTD.—The directors' fifth annual report and accounts for the year ended December 31, 1938, states:—Because of the less favourable economic conditions prevailing this year, capital additions have been kept at a lower figure of £54,915. As usual, all maintenance expenses have been charged to costs and all equipment kept in excellent condition. Considering the unsettled business and political situation ruling during the past year, the increase of subsidised foreign competition in a number of markets, and marked increases in items such as fuel and taxes, the profit for the year, while lower than the previous year, can be regarded as satisfactory. The accounts show that the profit for the year ended December 31, 1938, after providing for income tax and depreciation, amounts to £108,907 19s., to which is to be added the carry-forward from the previous year of £219,968 17s., making a total of £328,876 16s. Out of which has been set aside preference dividends for the year

1938, less tax, £16,087 10s., reserve against trade investment £16,000, and interim ordinary dividends paid during the year 1938, free of tax, £100,000, leaving a balance of £132,087 10s., which the directors recommend should be carried forward. Two directors, Mr. E. M. Queeny and Mr. T. P. Berington, retire, and offer themselves for re-election.

THE KRASKA CO., LTD.—Notice is given in "The London Gazette" that a meeting of the creditors of the above-named company has been convened for February 21, 1939, at the offices of Messrs. Reddall, Osborne & Co., 1 Guildhall Chambers, Basinghall Street, London, E.C.2.

THE SURGICAL MANUFACTURING CO., LTD., Mortimer Street, London, W.1.—An order for the compulsory winding up of this company was granted by Mr. Justice Bennett in the Chancery Division on Tuesday, February 14. The order was made on the petition of two debenture holders, Mr. E. G. Norman, of Horley, Surrey, and Mr. H. Edwards, of Chobham, Surrey. The matter was originally before the Court on October 17, last year, and was stood over on a number of occasions for the purpose of ascertaining whether the company was solvent. When the petition was mentioned to Mr. Justice Bennett on Friday, Mr. Milner Holland (instructed by Messrs. Rubinstein, Nash & Co.), who appeared for the petitioning creditors, said that the receiver appointed in December had substantially negotiated a sale of the assets, and on that footing the company was completely insolvent. There was no reasonable prospect of third debenture holders getting their money back. Mr. Milner Holland on Tuesday stated that opposition to the winding up order had been withdrawn.

Coming Events

Sunday, February 19

Manchester Branch, Catholic Pharmaceutical Guild, Link Society Rooms, John Dalton Street, at 3 p.m. Address by Mr. W. J. Merrick.

Monday, February 20

Association of Pharmaceutical Employees, 17 Bloomsbury Square, London, W.C.1, at 8.30 p.m. Annual meeting.

Tuesday, February 21

Birmingham Pharmaceutical Association, Imperial Hotel, Temple Street, at 8.45 p.m. Juniors' business meeting.

Manchester Branch, Guild of Public Pharmacists, Grand Hotel, at 7 p.m. Dinner dance.

North Metropolitan Branch, Pharmaceutical Society, North Library, Manor Gardens, Holloway Road, N.7, at 8.30 p.m. Dr. A. Crawford on "Role of Minerals in Nutrition."

Birmingham Branch, P.D.A., Imperial Hotel, at 8.40 p.m. Mr. J. E. Saunders on "Aids to Sales."

South of England College of Pharmacy, Grosvenor Hall, Buckingham Palace Road, London, S.W.1, at 8 p.m. Annual reunion and dance.

Wednesday, February 22

Anglesey, N. Carnarvonshire and Colwyn Bay Branch, N.P.U., North Western Hotel, Llandudno, at 3 p.m. Address by Mr. S. J. Stearn.

Leicester and Leicestershire Branch, Pharmaceutical Society, College of Technology, at 8 p.m. Mr. A. R. Chamings, B.Pharm., on "Survey of Modern Therapy."

Portsmouth Branch, Pharmaceutical Society, Municipal College, at 3 p.m. Mr. W. E. James on "The Trend of Modern Medicine."

Thames Valley Pharmacists' Association, Restaurant Frascati, 32 Oxford Street, London, W.1, at 7 p.m. Annual dinner and dance.

West London Branch, Pharmaceutical Society, Stewart's Restaurant, 50 Old Bond Street, W.1, at 8.30 p.m. Supper. Mr. W. W. Wakefield, M.P., on "Customs and Procedure of the House of Commons."

Thursday, February 23

Manchester Pharmaceutical Association (Junior Branch), Victoria Hotel, Deansgate, at 8.30 p.m. Whist drive.

North Staffordshire Branch, Pharmaceutical Society, Jubilee Hall, Stoke-on-Trent. Annual dinner and dance.

West Ham Association of Pharmacists, Waldorf Hotel, Aldwych, London, W.C.2, at 6.30 p.m. Annual dinner, dance and cabaret.

Saturday, February 25

Special Brigade, R.E. (All Coys.), Bedford Corner Hotel, Tottenham Court Road, London, W.1. Annual dinner. Tickets from Mr. J. M. Oakey, 7 Broadbent Street, London, W.1.

Tuberculosis After Inoculation

AFTER a hearing lasting six days the case for the plaintiffs closed on February 14 in the High Court, Dublin, before Mr. Justice Conor Maguire and a jury in the action brought by Michael O'Kennelly, Waterford, and his three sons, James, Nicholas and Lawrence, suing through their father, to recover damages for injuries alleged to have been caused following anti-diphtheria injections (*C. & D.*, February 11, p. 145). The father claimed £5,000 damages in respect of each of these children, £1,000 for medical expenses and treatment, and £100 for the death of another child named Susan, following inoculation. The action is brought against Dr. Daniel T. McCarthy, Dungarvan, and the Wellcome Foundation, Ltd. (Burroughs Wellcome & Co.), Beckenham, and Snow Hill Buildings, London. It was alleged that as the result of inoculation the girl Susan and her brothers contracted tubercular disease, and that as a result the girl died. The claim against Dr. McCarthy was that he warranted the fitness of the preparation used. In his defence Dr. McCarthy denied giving any warranty, while the Wellcome Foundation, Ltd., denied there was any negligence in the manufacture of the T.A.F. prophylactic used. Opening the case for the plaintiffs, Mr. E. J. Kelly, K.C., alleged negligence against the Wellcome Foundation in allowing a bottle containing tubercle bacilli to slip through their hands into a consignment of T.A.F. A number of medical witnesses were examined for the plaintiffs, including Dr. O'Donovan, bacteriologist, Cork, Dr. Kylie, Cork, Surgeon McAuley, Dublin, all of whom, on cross-examination, expressed the view that such mistake was unlikely. Dr. John McGrath, State pathologist of Eire, said he could not escape from the conclusion that the preparation used for the inoculations contained a suspension of tubercle bacilli.

CASE AGAINST DOCTOR DISMISSED

When the hearing was resumed on February 14 Dr. Boxwell, president of the Royal College of Physicians, Ireland, examined for the plaintiffs, said in his opinion it would be very difficult to infect a whole bottle of T.A.F. with tubercle bacilli by reason of a small fleck of sputum falling on the needle of a syringe. If the sputum were on the outside of the needle the major portion of it, in his opinion, would be brushed off as the needle was pushed through the rubber cap into the bottle. Furthermore, he did not believe that a spot of sputum would contain sufficient quantity of bacilli to produce the results seen in the present case. At the conclusion of evidence for the plaintiff, Mr. Martin Maguire, K.C., who appeared for Dr. McCarthy, asked for a direction on the grounds that no evidence had been given by the plaintiffs' side establishing that the doctor had given any warranty as to the fitness of prophylactic used. Mr. Justice Maguire said he must accede to the application for a direction, as there was no evidence of a contract of sale. Accordingly he must dismiss this action.

Mr. J. M. Fitzgerald, K.C., who appeared for the Wellcome Foundation, Ltd., asked for a direction on behalf of his clients on the grounds that there was no evidence to go to the jury to support the plea of negligence made against the Wellcome Foundation, Ltd. It was alleged that the prophylactic used was manufactured, stored and issued by his clients in a negligent manner, but this was not proved. It was alleged that the bottle of T.A.F. used for the inoculation of these children on November 24 contained noxious and harmful ingredients, namely, tubercle bacilli, but no evidence had been given that the bottle contained tubercle bacilli in suspension. A series of scientific witnesses had been produced for the plaintiff, who stated that the bottle might have been infected, but their evidence was merely a series of inferences. Dr. O'Donovan, Dr. Kylie, and Dr. McAuley, all called for the plaintiff, agreed that the possibility of a bottle containing a suspension of tubercle bacilli being substituted in error for T.A.F. at the Wellcome Foundation was very unlikely, but they agreed there was a possibility of a bottle of T.A.F. being infected by a syringe or a fleck of sputum, or infection from a cold abscess. He submitted the jury should not be asked to consider a case in which they could only speculate as to which of these possibilities happened. Mr. Kelly said a case like the present one was always impossible to prove by positive evidence. They had the positive evidence of the doctor and nurses that the inocu-

lations were properly carried out. The question of the manufacture of the T.A.F. was one of inference and should go to the jury. Mr. Justice Maguire decided to let the case go to the jury, and the defence in the Wellcome case was then proceeded with.

EVIDENCE FOR THE MANUFACTURERS

Mr. Fitzgerald, opening the case for the defendants, pointed out at the outset that the Wellcome Foundation was not a corporation run for profit, but for the express purpose of making medicaments for the alleviation of pain and suffering; and the eradication of disease. For the plaintiff to succeed the jury would have to be satisfied that the bottle used on November 24, 1936, contained poisonous microbes instead of a beneficial prophylactic to prevent diphtheria. He suggested that if Dr. McCarthy had taken out on that date a bottle of tubercle bacilli in suspension instead of T.A.F. he would have inevitably recognised it, or else he would have been guilty of serious neglect through want of observation. Regarding the injections generally, Dr. McCarthy's conduct in his (Mr. Fitzgerald's) opinion was about as happy-go-lucky and as careless as one could well imagine. The key that would unlock the truth in this case was what was left of the last bottle on November 24 in Ring. That bottle had been examined by various doctors and was found to be sterile and contained no contamination of any kind. So far as the Wellcome Foundation was concerned, they had never burked any inquiry, and desired that responsibility for the unfortunate infection should be traced to the proper quarter. He was going to suggest that the sterilisation in this instance was deplorably inefficient, and that the instruments and dressings placed in the drum could have been infected. Witnesses to be called by him would include Professor Blacklock, Glasgow University, and Professor Bigger, Trinity College, Dublin. Dealing with the preparation of T.A.F. at the Wellcome laboratories, Mr. Fitzgerald said the room in which the serum was kept was as much cut off from the room in which the tubercle suspension was as if the sea was between them. There were at least six separate inspections and checks of every bottle before these bottles of T.A.F. were finally packed from the trays. Eminent pathologists would prove that minute care was taken in the practical tests made at the Wellcome Laboratories. This concluded the hearing on February 14.

Parliamentary News

MARKING OF MANUFACTURED GOODS

A Bill "to prohibit misleading stamping or stencilling of manufactured goods" was introduced into the House of Commons on February 8 by Sir Nairne Stewart Sandeman. The Bill, if passed, will make it a false description within the meaning of the Merchandise Marks Act to apply to goods a trade description that represents or is calculated to represent that goods manufactured abroad and subjected in the United Kingdom to some further treatment or process have been wholly manufactured in the United Kingdom.

ADVERTISING OF ANIMAL MEDICINES

Mr. Hopkin asked the Minister of Agriculture, on February 13, whether he was aware of the heavy loss caused to farmers by the sale of ineffective or fraudulent animal medicines, drenches, and the like; whether his attention had been drawn to the beneficial effects in South Africa of Act No. 21 of 1917, and Act No. 13 of 1929, which comprehensively deal with this evil; and whether he would consider setting up a departmental committee to advise him as to the need for similar legislation in this country?

Sir R. Dorman-Smith (Minister of Agriculture): I am aware that the claims made in respect of some of the animal medicines and the like on the market are exaggerated, but I have no means of estimating the losses suffered in consequence. I am acquainted with the relevant legislation in the Union of South Africa, but I have no information as to its effects. As regards the last part of the question, I will bear the hon. Member's suggestion in mind.

Pharmaceutical Society's Conversazione

A CONVERSAZIONE was held by the Pharmaceutical Society of Great Britain at 17 Bloomsbury Square, London, W.C.1, on February 14. The occasion was marked by an excellent attendance of guests (who were received by Mr. Thomas Guthrie, president of the Society) and also by the nature of the scientific exhibits and demonstrations. It is said that about 700 had accepted invitations, and at times whole sections of chemists and their lady friends had to remain stationary until one or two ardent souls in front had satisfied their curiosity regarding "the effects of adrenaline and nervous stimulation on the vessels in a rabbit's ear," or the wonder of cataphoresis. But for the definite directions to visitors in a printed programme regarding the order of their inspection all would have been chaos, but with patience one gradually moved from pharmacognosy research through the biochemical laboratory to pharmacology (glancing at "the assay of histamine on guinea-pig's intestine" and "the excretion of porphyrins after the administration of antipyretics") to a secluded alcove where was given lectures with lantern-slides illustrating deficiency diseases in animals and man. Then came the pharmacy laboratory—a popular room with "a phantomist insecticide machine," as one of its mysterious attractions. The museum contained one or two specialties of the moment, including samples of Bulgarian belladonna, ephedra and its varieties, and an old earthenware Japanese still. Among the exhibits here were the coloured illustrations of ephedra plant taken from an art supplement which was specially prepared for *THE CHEMIST AND DRUGGIST* (November 26, 1938). It will be recalled that the pictures were included in a striking article on "Ephedrine and Ma Huang," by Dr. K. K. Chen, whose researches are mainly responsible for the position the herb and its alkaloid holds to-day. The dispensary exhibits included sterilisation (in process) autoclaves, bacterial filters and so on, and in one room there was an exhibition of the historical development of pharmaceutical containers and packing. The hurry and bustle was somewhat chastened by the serene atmosphere of the

Library, where Miss Smelt was assiduous in showing, describing and explaining the many precious volumes over which she presides. Besides all the pharmacopœias from the earliest up to the present day there were foreign pharmacopœias in chronological sequence, including the two most recently published, the French Codex and the Eesti Farmakopõa (Pharmacopœa Estonica). This is the first Estonian pharmacopœia that has ever been published, and it rests beside recently published editions of Finnish, Polish and Portuguese. The herbals are fascinating, specimens being on view of the Passau Herbarius (1485)—the earliest printed book in the Society's library—to Salmon's "Botanologia" (1710). There were in the Middle Library some historically interesting donations, perhaps the most intriguing being a number of acrimonious letters and articles (in four volumes, 1840-1843) "deprecating the formation of the Pharmaceutical Society and the publication of the *Pharmaceutical Journal*." Leaving ancient history with reluctance, one passed through the Law Department containing registers and other records and a curious series of certificates as issued by the Society from that designed by H. P. Briggs, R.A., in 1841 to the very latest 1933 production. Thereafter physiology and biochemistry claimed our attention until we reached chemotherapy and then pure chemistry—with the research laboratory under working conditions. The Council Chamber was dominated by large-scale models of the new building about to be erected in Brunswick Square, and in the Lecture Theatre a series of lantern slides illustrating the present and the future premises were shown and described by the vice-president (Mr. Walter Deacon). There were two seances by Mr. Deacon, and, after the first, Mr. Thomas Marns made a strong appeal for subscriptions to help along the good work. Donations were coming in well, he said, but he urged everyone present to return to their branches and work up enthusiasm for the project, which wanted still more finance. The Examination Hall was brightened of its usual sombre gloom by being converted into a refreshment hall, where the president (Mr. Thomas Guthrie) received the Society's guests to light music.

Liverpool Heckles Mr. Marns

MR. T. MARNS, in an address on the Pharmaceutical Society's new building, given at an after-supper meeting of members of the Liverpool Branch of the Pharmaceutical Society on February 8, said "You may have heard stories about a grandiose palace of pharmacy in Brunswick Square; do not believe them; they are all bunk." Mr. T. Marns reviewed the Society's history, and described the makeshift methods that had had to be adopted at Bloomsbury Square. He outlined the methods that were being adopted to raise the necessary funds for the Brunswick Square building. Accommodation, he said, would be provided for many activities for which there was no room in the present building, and there would be scope for developments such as were bound to occur with the passing of years. He was confident these would be no less important than those which had taken place in the past hundred years. Numerous lantern slides were exhibited, giving impressions of the new building. Mr. John Rae, who presided, commented on the strenuous task Mr. Marns had set himself in accepting the chairmanship of the appeal committee for the new building. At question time one member wanted to know what would be the cost of providing new equipment. Mr. Marns explained that the cost (£350,000) covered building and equipment; roughly £50,000 would be for equipment. They had the assurance of the treasurer of the Society that the present income would be sufficient to cover maintenance costs. "Is it intended to sub-let any portion of the building?" asked another member. The reply was that there would be no accommodation to sub-let. No provision had been made for taking in other tenants, though the Society would be able to hire the lecture theatre when it was not required for their own use. Mr. W. J. Tristram raised a question about costs, which Mr. Marns elucidated by explaining that £300,000 had already been found, part from donations and the remainder by a loan which had been obtained on favourable terms. Mr.

Haines amplified the point. The loan would be repaid from the Society's income over a period of thirty years. Another member asked if, in view of the important part that pharmacy played in national life, it was not possible to obtain a grant from the Government? Mr. Marns said this subject was being investigated. Recently they received a grant of £2,000 from the University of London. Whilst this was welcome, the prestige to the profession that went with the grant was of even greater importance. He believed he was justified in saying they would get money from the city companies. Mr. George Clubb referred to the forms which members were being asked to sign, promising annual subscriptions and donations for a period of seven years. What would be the position of a man who, say after three or four years, found he was not in a position to implement his promise. Was the document which he had to sign a legal deed, enabling the Society to recover any money due under the agreement in a court of law, or would the Society exercise discretionary benevolence? Mr. Marns declared he "could not see the Pharmaceutical Society doing the Shylock act with any of its members." Mr. Haynes said the deed must necessarily be a legal document, but it must be left to the Society to exercise leniency in cases where leniency was called for. Deeds of covenant were expected to be numerous, and the possibility of default through special circumstances was a contingency which, he thought, could be regarded as an insurable risk. At any rate, an endeavour would be made to insure the risk. Another question asked was whether the multiple firms and the wholesale houses would contribute by means of donations. "Yes," replied Mr. Marns. Lord Trent had already given 10,000 guineas, the Proprietary Articles Trade Association had given £4,000, the trustees of the late Lord Leverhulme £4,000, in addition to other contributions. Mr. H. Humphreys Jones (Liverpool School of Pharmacy) proposed a vote of thanks to Messrs. Marns and Haynes, and Mr. W. E. Humphreys (vice-chairman) seconded.

Insurance Act Dispensing

ENGLAND AND WALES

East Anglia.—The total number of prescriptions dispensed in the East Anglian Joint (Pricing of Prescriptions) Committee's Area, comprising 18 Insurance Committees, during 1938, was 5,534,916, an increase of nearly 90,000 on the 1937 figures, themselves a record. The average cost of pricing, per 1,000 prescriptions, was 17s. 1d. compared with 16s. 5d. for 1937, an increase of 7.82d.

Essex.—Persons entitled to medical benefit in the Insurance Committee's area in 1938 numbered 572,320 against 528,187 in the preceding year. Chemists numbered 576 (thirteen more), and prescriptions dispensed totalled 2,170,274.

Kent.—The Insurance Committee on February 8 considered the case of a girl who swallowed doses of a gargle containing phenol and gargled with a mixture through the mistake of a chemist came up for discussion. The pharmaceutical service subcommittee reported that a complaint had been received from the girl's father; the chemist had admitted the error and expressed regret, but considered the accusation of casual indifference, raised by the insured person, was unfair. The subcommittee's report stated that the error was regarded as an example of extreme carelessness. Withholding of £1 from the chemist's remuneration was recommended.

Lancashire.—In the Lancashire Prescription Bureau's area during the period July 1-September 30, 1938, 555,775 prescriptions were dispensed, against 532,335 in the corresponding quarter of 1937 and 544,230 in 1936. The total prescription cost was £19,893, against £18,759 in 1937 and £18,644 in 1936, dispensing fees accounting for £9,984, against £9,568 and £9,868 for the corresponding quarters of 1937 and 1936. The average costs of ingredients and dispensing fees were 4.28d. and 4.31d. for 1938, 4.14d. and 4.31d. for 1937, and 3.87d. and 4.35d. for 1936. The highest total cost per prescription was in Westmorland (10.10d.) and the next Bury (8.93d.). The lowest average was in Barrow (7.97d.), with Burnley next (8.02d.). Patients totalled 500,235 on September 30, 1938, against 480,241 in 1937 and 474,135 in 1936.

Drug Tariff Amendments

In the Drug Tariff, January-March, 1939, certain amendments have been made. Thus in paragraph 3 (prices for drugs, preparations and appliances not included in Part III or Part IV of the Tariff), "injection" has been altered to "injection not supplied in ampoules." In order to enable a supplier to be paid for certain products at the price charged to him by a manufacturer or wholesaler where such price differs from the price in the agreed list, the following proviso has been added to clause 4 (2):—"Provided that in the case of an injection or a special medical product, where the price chargeable to the supplier differs from the net price specified in the agreed list and the supplier indicates for the information of the Pricing Office the net price paid and the name of the manufacturer or wholesaler from whom the preparation was obtained, the basic price shall be the net price chargeable to the supplier by that manufacturer or wholesaler." The wording of clause 15 has been revised to make it clear that the out-of-pocket expenses payable are those incurred in obtaining from a manufacturer or wholesaler for supply on an insurance prescription a preparation in one of the classes specified. Synonyms for industrial methylated spirit have been added to clause 18 (2) as follows:—S.V.M.; I.M.S.; spt. antisepticus and industrial. The term spt. antisepticus will not come into operation as a synonym for industrial methylated spirit until March 1. Until that date the term should be interpreted to mean the formula for "sp. antisepticus" in the National Formula for National Health Insurance Purposes, 1933. In clause 19, the term "surgical spirit" used without qualification is now stated to be interpreted as meaning the formula No. 2 included under "spirit chirurgicallis" in the B.P.C., 1934. The same proviso as to date applies as for "sp. antisepticus."

CHANGES IN LISTS

Part III of the Tariff now includes Parts IIIA and IVA of the Tariff previously in force, each drug which a chemist shall so far as practicable keep in stock being now distinguished by means of two asterisks. The following drugs, previously in

Part IVA of the Tariff, are now marked with two asterisks, and are, so far as practicable, to be kept in stock from March 1:—Acet. ipecac., B.P.C.; acid. benzoic, B.P.; acid. hydrochlor., B.P.; acid. oleic, B.P.; aethylmorph. hydrochlor., B.P.C.; bals. tolu., B.P.; benzamina (alkaloid) ..bezamin. hydrochlor., B.P.C.; benzoin., B.P.; calx. chlorinata, B.P.; catechu pulv., B.P.; chloralformamid., B.P.C.; ephedrina, B.P.C.; ext. euphorb. liq., B.P.C.; ext. scillæ liq., B.P.C.; homatropin. hydrobrom., B.P.; ipecac. pulv., B.P.; jalap. resin., B.P.C.; liq. azorubri, B.P.C.; mag. sulph. exsic., B.P.C.; oleoresin capsici, B.P.C.; ol. camph. rect., B.P.C.; ol. cocois., B.P.C.; physostigmin. salicyl, B.P.; sol. æth. nitros. conc. (1-7) ; spt. juniper, B.P.C.; tinct. aconit., B.P.C.; tinct. kramer, B.P.; ung. simplex alb., B.P.; viola crystallina, B.P.C.; virid. nitens, B.P.C.

The following drugs have been added to the Tariff and marked with two asterisks, and are also, so far as practicable, to be kept in stock from March 1:—Acid. boric., B.P. (*pulv. subtil.*); ext. colchici sicc., B.P.C.; ext. ergot. liq., B.P.14; ferrum redactum, B.P.; liq. ammon. cit. fort., B.P.C.; mist. bismuth. co. acid. c. pepsin, B.P.C.; ol. thymi., B.P.C.; spt. meth. indust. sine acetone., B.P.C.; strychnina, B.P.C.; sytax., B.P.; talc. pulv., B.P.C.; trypan blue. Particular attention is drawn to an alteration in the formula for tab. acid. acetylsal. co. (consisting of acid. acetylsal., phenacetin, and pulv. ipecac. et opii) previously included in the Drug Tariff and in the National Formulary, which has been replaced by the formula for tab. acid. acetylsal. co. included in the B.P.C., 1934. On and after March 1 tablets supplied on an insurance prescription for "tab. acid. acetylsal. co." or "tab. aspirin. co." must be in accordance with the B.P.C. formula, viz.:—

Acid. acetylsal.	...	...	...	gr. 3½
Phenacetin.	...	...	...	gr. 2½
Caffein.	...	...	...	gr. ½

In each tablet.

It should be observed that although tab. acid. acetylsal. et opii co., B.P.C. (now included in the Drug Tariff), contains the same ingredients as the tab. acid. acetylsal. co. previously included in the Drug Tariff and in the National Formulary, two tablets of the former are equivalent to one of the latter.

Prices for certain classes of homœopathic preparations have been included in Part III of the Tariff, and Part IV includes Parts IIIB and IVB of the Tariff previously in force. Each appliance or size or weight of an appliance that a chemist shall, so far as possible, keep in stock, is distinguished by two asterisks. An appendix to Part IV includes the specifications for standard and wound dressings. A new part, Part VII, to be known as The Drug Tariff Formulary, includes the formulas of all preparations peculiar to the revised National Formulary for N.H.I. purposes; other preparations ordinarily required to be supplied without admixture; and preparations for which special formulas are in force. Where a title in the Formulary is used in a prescription without qualification the preparation dispensed must comply with the standard or formula given under the title in the Drug Tariff Formulary. Formulas of preparations marked "N.F." are in accordance with the formulas of the National Formula for N.H.I. purposes, 1939, of which the revised formulas come into operation on March 1.

SCOTLAND

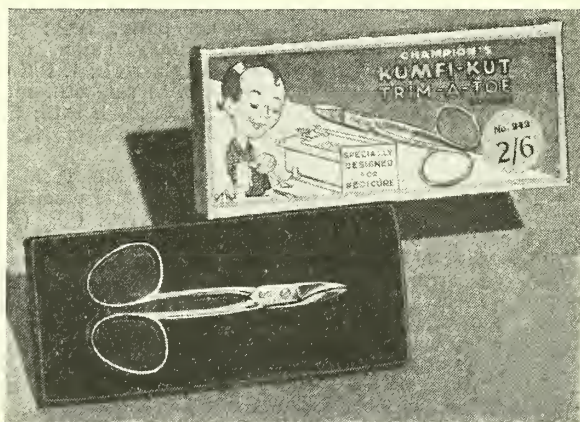
Pharmaceutical Standing Committee (Scotland)

PENDING a decision on the claim for an increased dispensing fee, in support of which the Pharmaceutical Standing Committee (as authorised by the General Council of Panel Chemists) commissioned Professor Annan, C.A., to formulate and submit statistical data, the Committee has agreed to the continuance of the existing terms for 1939, on the understanding that any new terms will come into operation from the date of agreement. The Committee has been approached by the Seamen's National Insurance Society with a view to reaching some agreement for the supply of medicines and appliances. In accordance with the decision of the General Council of Panel Chemists, the Seamen's Society has been informed that if they conform to the National Health Insurance conditions they will have their dispensing done by panel chemists on the same terms as all other insured persons. Negotiations are not yet completed.

Trade Notes

TECHNICAL WHITE OILS.—The Manchester Oil Refinery, Ltd., Barton, Manchester, are able to supply technical white oils in all grades, colourless, odourless and tasteless. These oils are British refined.

PEDICURE SCISSORS.—The new hollow-edged pedicure scissors, manufactured by Champion & Co., 35 Champion



Works, Sheffield, 4, are Trim-a-Toe. They are packed in boxes as shown in the illustration and are advertised in a widely circulating Press.

TAMPAX BONUS OFFER.—Special window display bonus parcel of Tampax for a limited period only is obtainable on terms outlined elsewhere in this issue. A national advertising campaign is now in progress. The sole distributors are Splendot, Ltd., 5 Beastmarket Hill, Nottingham, for Tampax, Ltd. Stocks are carried by the usual wholesalers.

WOMAN'S FAIR.—An announcement in connexion with Woman's Fair and Modern Homes Exhibition, which opens at Olympia on November 7 to 30, is given in our advertisement pages. Early intimation of possible space requirements should be sent to Mr. F. E. Gordon (Organising Director), Exhibition Promoters (Olympia), Ltd., 32 St. James's Street, London, S.W.1.

AMAMI SHAMPOO BONUS.—Prichard & Constance (Manufacturing), Ltd., 167 High Holborn, London, W.C.1, announce a bonus offer of Amami shampoos commencing Monday, February 20. This offer remains open until April 30. Bonus parcels may be ordered through the usual wholesalers or direct from Messrs. Prichard & Constance. Further details are given elsewhere in this issue.

EKNER TONIC HEALTH SALTS.—Illustrated on this page is the

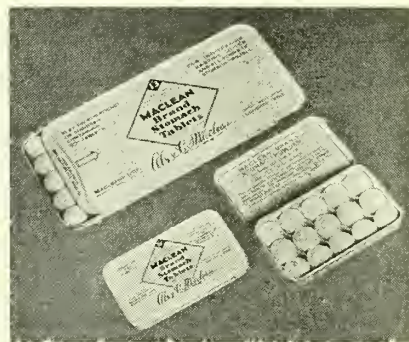


Ekner three-in-one tonic health salts, to which reference was made in these columns on February 4, p. 122. The health salt is packed in tins and cartons. Distribution is made by the Sun Island Chemicals, Ltd., 320 Regent Street, London, W.1, and is a Kathleen Court (England), Ltd., product, who were the originators of Cooltan. A generous margin of profit is allowed, and there are special quotations on quantities. Further details were given in our advertisement pages last week.

ANDREWS BONUS OFFER.—A bonus offer conditional on a fortnight's display is made by the makers of Andrews liver salt, Scott & Turner, Ltd., Andrews House, Newcastle-upon-Tyne, 2.

TENZ BONUS OFFER.—Tenz, Ltd., manufacturing chemists, Tenz House, Cambridge Place, Paddington, London, W.2, are making a bonus offer in these tablets together with a small, neat and indestructible showcase to carry a dozen packs of the tablets. These tablets are intended as breath deodorisers. The bonus offer closes on March 31.

MACLEAN BRAND STOMACH TABLETS.—Macleans, Ltd., Great West Road, Brentford, have a new pack for stomach tablets, which is illustrated herewith. The tin is thinner than the average cigarette-case and is convenient for pocket or handbag. Two sizes are issued, the larger containing fifty tablets in a sliding lid tin, the smaller size of 15 tablets having the ordinary hinged lid. The lettering is blue on a white ground.



QUINPHOS TONIC MIXTURE.—Thompson & Capper Wholesale, Ltd., Speke Hall Road, Liverpool, 19, have introduced a tonic mixture for colds, neuralgia and generally to tone up the system. The formula shows that this mixture contains quinine sulphate, iron, phosphoric acid and flavourings. The mixture is packed in a 10-oz. bottle with bakelite screw cap, and the dose is a tablespoonful.

RASELET ELECTRIC DRY SHAVER.—This dry shaver has been recently introduced and manufactured in white and in attractive colours. It is regularly advertised in the national Press. It has certain characteristics peculiarly its own. The motor is described as the only razor with interruption motor, it is universal working a.c. and d.c., there are 5,700 revolutions, and there is no danger of burning out by wrong voltage. Perfect workmanship is guaranteed in every detail. Further details may be obtained from Ducati (England), Ltd., Imperial House, 80/86 Regent Street, London, W.1.

PEARS' LINK WITH WALT DISNEY.—The makers of Pears' soap, A. & F. Pears, Ltd., London Road, Isleworth, have acquired sole rights in a new card game called "Shuffled Symphonies" which is described as Walt Disney's latest achievement. This game requires forty-five cards bearing a picture of a Walt Disney character. The cards are well printed



in full colour on linen-grained board and are washable. These cards are packed in a carton together with two cakes of Golden Glory soap, the carton having apertures which show the contents as illustrated. The cards are packed in a display outer containing one dozen. A three-panel display screen in colour is obtainable. The scheme is backed by extensive Press advertising.

Births

Notices for insertion in this column must be properly authenticated.

AUTHERS.—At Fermaine Nursing Home, Enfield, on February 9, Dorothy M. Authers, M.P.S. (*née* Jeffery), the wife of Ellis W. Authers, Enfield, of a daughter.

Deaths

GOULD.—At his home, Stanley Road, Teddington, on February 2, Mr. William Emmanuel Gould, chemist and druggist. Mr. Gould, who qualified in 1887, carried on business for thirty years at the junction of Broad Street and Walpole Road, retiring in 1919. He took great interest in the affairs of Teddington Memorial Hospital, being a member of the Committee of Management. He was an active member of Twickenham Congregational Church, of which he was organist and choirmaster for a quarter of a century. He was likewise a P.M. of the Richmond Lodge of Freemasons and a life governor of the Royal Masonic Hospital.

HOBBS.—On February 3, Mr. John Hobbs, Goodmayes, aged seventy-seven. Mr. Hobbs was formerly general manager of Stafford, Allen & Sons, Ltd., manufacturing chemists, London, N.1. He commenced business with the company in 1878, being for some time manager of the spice department, and retired at the end of 1926.

HOWARD.—As briefly announced in last week's *C. & D.* (p. 151), the death occurred on February 8 of Mr. David Lloyd Howard, J.P., vice-chairman of Howards & Sons, Ltd., Ilford, aged seventy-three. Mr. Howard

was the eldest son of the late Mr. David Howard, J.P., D.L., and was born at Stamford Hill, London, N. He studied chemistry at University College, London, and became a partner in Howards & Sons in 1888, and a managing director when the business was converted into a limited company in 1903. Mr. Howard was held in high esteem by all bodies connected with the drug trade, and among the honours which had been conferred upon him were those of honorary member of the Pharmaceutical Society, chairman of the British Pharmaceutical Conference (1926 and 1927), chairman of the Drug and Fine

Chemical Manufacturers' Association, and also of the Conference between the Association and the trade union representatives. Mr. Howard was also a member of the Society of Chemical Industry, having been treasurer and vice-president, a member of the Society of Public Analysts and a former member of the Council, a member of the Association of British Chemical Manufacturers and a member of the Grand Council of the Federation of British Industries. He was also a trustee of the Wholesale Drug Trade Association. In his address to the British Pharmaceutical Conference in 1926 Mr. Howard dealt with "The History and Development of the British Fine Chemical Industry," and put on record a remarkable survey of the subject, while in the following year his subject was "Some Modern Developments in Chemical Plant," an equally outstanding contribution. In his youth Mr. Howard was an ardent player of Rugby football and a very keen cyclist during the tricycle and penny-farthing periods. Later on he became a keen fly-fisherman, and spent his holidays enjoying that recreation in Wales, Scotland and Norway. Mr. Howard was a keen churchman, and was for many years a member of the Council for the London over-the-border Church Fund. He had a very fine voice and was for a long time in St. Paul's Special Service Choir, in which he sang at Queen Victoria's Jubilee. For many years he was choirmaster at Chingford Church.

JARVIS.—At his home in Surbiton, on February 5, Mr. Walter H. Jarvis, London warehouse manager for J. F. Mac-

farlan & Co., aged sixty-three. Mr. Jarvis served his apprenticeship with Kemp & Co., Horncastle, and was for some time with Messrs. Hebden, Halifax. He joined the staff of J. F. Macfarlan & Co., in 1901.

LESLIE.—At Colchester, on February 11, Mr. R. A. P. Leslie, late managing director of Smith, Stanistreet & Co., Ltd., manufacturing chemists, Calcutta. Mr. Leslie went out to India originally in 1889 to join his uncle in business at Hyderabad. He subsequently started business on his own account there under the style of Leslie, Gay & Co., which firm is still in existence. Later he joined Smith, Stanistreet & Co. and became managing director in 1920. He retired from India in 1932, and since that time has lived in retirement near Colchester. Mr. Leslie took a prominent part in Freemasonry in India and was at one time Master and Principal of his mother Lodge and Chapter "Endeavour." He also held high provincial rank in the Grand Lodge of all Scottish Freemasonry in India.

PITT.—Recently, Mr. Charles Frederick Pitt, M.P.S., 14 Glenhurst Avenue, London, N.W.5. Mr. Pitt qualified in 1894 and for upwards of thirty-eight years he represented C. J. Hewlett & Son, Ltd., manufacturing chemists, Charlotte Road, London, E.C.2, in the Eastern counties.

TRICK.—At "Oakmead," York Road, New Barnet, Herts, on February 12, Mr. William Burrows Trick, M.P.S., J.P., aged ninety-two. Mr. Trick, who served his apprenticeship at Neath, had been a member of the Pharmaceutical Society since 1873, and was often referred to as "The Grand Old Man of Pharmacy," better known to many as the "Guvnor." He was senior director and one of the founders of Lewis & Burrows, Ltd., which company was formed in 1895. Mr. Trick was a member of the London Pharmaceutical Committee and the London County Executive Committee for many years. He was Mayor of Stoke Newington in 1906-07.

WILLCOCK.—Suddenly, at Wolverhampton, on February 9, Alderman Frederick Albert Willcock, chemist and druggist, aged seventy-six. He was apprenticed with the late Alderman Steward, Worcester, and after qualifying started a business in Victoria Street, Wolverhampton (his native town). On his retiring about fifteen years ago Mr. Willcock was an ex-president of the Wolverhampton and District Chemists' Association and has been prominent in the public life of the town, including the Town Council, as mayor and on the Bench.

WOODCOCK.—At 8 Collingwood Road, Great Yarmouth, on February 12, Mr. Thomas John Woodcock, M.P.S., aged seventy-five. Mr. Woodcock had carried on business on Church Plain for a long period, and a few years ago transferred this business to another establishment, 3 Caister Road, which has been in charge of his daughter, Miss C. M. Woodcock, M.P.S., since it was opened. His son, Mr. G. T. Woodcock, M.P.S., carries on business at 17 Northgate Street, Great Yarmouth.

Personalities

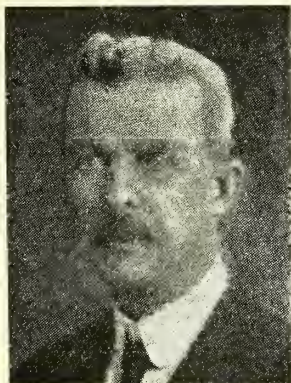
MR. A. W. TOPPING, a director of Gale, Baiss & Co., Ltd., manufacturing chemists, London, S.E.15, was recently installed Worshipful Master of Kingsgate Lodge, No. 4882.

MR. R. CAMPBELL FEATHER, M.A., B.Sc., managing director of Meggeson & Co., Ltd., has been elected chairman of the Twickenham Technical Education Subcommittee for a third year.

MR. JOHN M. EDWARDS, a director of Drug Houses of Australia Export, Ltd., merchants and shippers, London, has recently returned from a business tour of Australia and New Zealand.

MR. B. E. KENT, M.P.S., advertising and publicity manager of Allen & Hanburys, Ltd., London, E.2, has been elected vice-president of the Incorporated Society of Advertisement Consultants.

MR. JOHN AUSTEN, chairman and managing director of G. T. W. Newsholme, Ltd., chemists, High Street, Sheffield, was on February 8 presented with a case of fish eaters by the other directors and a case of cutlery by the staff on completion of fifty years' service with the firm. Mr. Austin, who is sixty-nine years of age, was born in Sussex, but removed to Sheffield in order to serve his apprenticeship with a relative. Mr. A. H. Culverhouse made the presentation on behalf of the directors and Mr. J. A. Southern. Picture on p. 171.



Mr. D. LLOYD HOWARD



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"THE CHART OF WAR GASES" (Reprinted from C. & D. 30.IV.38) provides in a concise and clear form a brief description of the chief poison gases; methods of detection; their effects and time action, and an outline of the First Aid methods to be employed to casualties. The chart has been carefully drawn up and is based on information contained in the Home Office A.R.P. Handbooks and the manuals of national First Aid organisations. It should be useful to the pharmacist in the course of his business. Customers interested in the purchase of air raid precautions goods will appreciate a copy for their own use. Chemical manufacturers and firms engaged in all branches of the wholesale drug trade will find the chart of practical use in connexion with arrangements they make for air raid precautions, and it is suggested that copies of the chart should be distributed to their staffs.

Reprints are available at the following prices, postage included:—

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Orders, together with remittance, should be addressed to The Publisher, THE CHEMIST AND DRUGGIST, 28 Essex Street, London, W.C.2.

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Finance and the Building

FOR many weeks pharmacists so minded have been able to read about progress at Brunswick Square where—as everyone should know—the new building to which pharmacy is committed will stand. Reports of financial progress started more slowly at a later date. But there are now definite signs that financial statements will be more frequently made. It would be unfortunate if these were presented without due explanation lest the average person should form a more or less erroneous impression. According to the official organ, it appears that the total cost of a satisfactory building amounts to £350,000, due to the rapid rise in the cost of materials. This is, doubtless, an adequate explanation of the increase in the original estimate. But some elucidation of the other figures cited is needed to ensure that the amount of the loan is not easily passed over. It is stated that of this £350,000 the sum of £275,000 has already been found, part from the Society's resources accumulated "during the past hundred years" and the balance from a loan which will be repaid out of income. At the annual meeting of the Society held on May 18, 1938 (*C. & D.*, May 21, p. 584), the President is reported to have said that most of the £175,000 saved had been accumulated in the past fifteen years. It would be difficult to controvert a statement which might have been added, i.e., that the finances of the Society really began to improve with the return of men from the army in 1919 and 1920, who, aided by Government grants, proceeded to qualify. The improvement increased rapidly with the advent of the 1933 Act. The war years were lean years indeed as could well be shown, and if we turn to our retrospect this week (p. 200) it will be seen that pharmaceutical progress and poverty together go back to a much earlier period and curiously enough there is a striking parallel. The "next hundred thousand" is a loan at a "favourable rate of interest"—say, 3½ per cent.—to be repaid out of income. A large sum will be needed therefore out of the income for repayment of

capital and interest. The remaining £75,000 is conveniently divided into three parts—£25,000 has been given, £25,000 is hoped for from friendly organisations and benefactors, and £25,000 from the Society's members. It would seem on this showing therefore that the financial haven of safety is already in sight. But is it? It is an open secret that the question of financing the new building will become an increasingly serious one for the Council, who are not anxious to have to return for a further loan. The expenditure of the monies accruing to the Society as a result of the passing of the Pharmacy and Poisons Act, 1933, appears to have increased at an alarming rate and kept pace to a large extent with increased receipts.

As already stated, pharmacy is committed to the building. It need cause no surprise therefore to find that the tempo of financial appeal is increasing and must increase for some time. But something of the methods of the high-pressure salesman will be needed rather than pleas for further sacrifices from a long-suffering section of the community. Is it not time for the Society's Council itself to sacrifice some of the singular views it holds as exemplified in the schemes which are eating up so great a part of its income? Meantime, pharmacists are being asked to give, and the voluntary system is well favoured in this country, up to a point. Of course, there are always the statutory powers conferred on the Council by the 1933 Act to increase fees.

International Trade in January

INTERNATIONAL conditions throughout January were such that it was hardly to be expected that the trading returns would be maintained at the levels of the corresponding months of the past two or three years. In all directions, imports, exports and re-exports, there is a contraction of the values of the goods handled; the deficits are, however, discounted by the decline in commodity values, which is assessed at about 6½ per cent. for the year. Imports show a drop of £9,300,000 compared with the landings in January, 1938; exports of U.K. merchandise are down by only £1,700,000 and re-exports show a loss of about £200,000. The net balance, on the debit side of the national ledger for the month is £31,494,860, compared with £38,895,000 in January, 1938. The contraction of over £7,000,000 in the debit is the only satisfactory feature. It is, however, essential that our exports should improve as the year progresses and, under present conditions, this is only likely to be achieved by increased sales to Empire markets. The Department of Overseas Trade might usefully organise and persist in a propaganda campaign throughout the Empire on the basis that this country is giving the utmost preference, by way of a free market to Empire goods and such facilities can be continued only if, in return, they, the Empire countries, provide the fullest opportunity for the sale of our goods in their markets.

All Classes of Merchandise	Imports	Exports of U.K. Goods	Total Exports including Re-exports
January, 1939 ...	£ 75,570,411	£ 39,479,598	£ 44,075,551
" 1938 ...	84,879,549	41,183,132	45,984,540
" 1937 ...	75,713,023	39,100,726	44,170,755

The January figures for the "Chemicals, etc." group show a slight increase in the value of imports, the amount being

nearly £10,800 more than in January, 1938. Exports of British products during the month show a drop of £186,200 compared with twelve months ago, and re-exports fell by £2,750. The credit balance for the month amounted to £712,636 compared with £912,352 in January, 1938. The chief sources of supply in January 1939 and 1938 were: Germany, £282,848 (£354,252); United States of America, £220,459 (£225,547); Switzerland, £72,488 (£71,980); France, £57,293 (£57,698); Norway, £50,104 (£56,770); Holland, £45,111 (£35,980); and Canada, £35,107 (£29,321).

Chemicals, Drugs, Dyes and Colours	January		
	1939	1938	1937
Imports	£ 1,073,904	£ 1,063,119	£ 1,112,360
Exports of U.K. manufac- ture	1,750,609	1,936,790	1,831,364
Re-exports	35,931	38,681	43,449

The chief Empire destinations of chemical shipments during the month were: British India, £248,843 (£275,439); Australia, £136,440 (£168,613); Union of South Africa, £129,141 (£178,399); Eire, £95,410 (£101,845); New Zealand, £69,385 (£63,496); Canada, £59,289 (£77,575). Shipments to foreign markets included United States of America, £121,704 (£94,707); Argentine Republic, £58,375 (£76,238); France, £63,181 (£58,576); Norway, £43,662 (£31,292); Sweden, £42,010 (£37,739); and Denmark, £30,302 (£43,652).

Advance in Mercury

ABOUT a year ago the shipment quotation for Spanish-Italian mercury was 64 dollars per bottle, f.o.b. Continent; last April it was quoted at 62 dollars, with the ex store, London, price £12 10s. At the beginning of this year the shipment figure was 70 dollars, f.o.b., and £15 4s. ex store. During this month a series of advances has been recorded, bringing the current quotation up to 77 dollars, f.o.b., and £16 10s. ex store, London. The sterling price of the metal has increased about 30 per cent. in twelve months. During the same period, makers' prices for mercury chloride, B.P., have advanced from 5s. 5d. to 6s. 5d. per lb. in minimum cwt. lots. This includes the increase of 6d. notified this week and represents an advance on the year of roughly 20 per cent. The other salts have been advanced proportionately.

The sharp upward movement in metal prices—7 dollars in the past three weeks—is stated to be due to a number of reasons. First, the demand recently, chiefly from European countries, has been heavy with immediate delivery required. Secondly, production at the Spanish Almaden mines has been very limited for the past year or so. It is now problematical if the limited stocks that may still be at the mines can be got out of the country. It is not known if the mines have been damaged, but it is suggested that very little production is likely this year before the hot weather sets in, when work ceases till the late autumn. It seems, therefore, that the bulk of the world's requirements will for some time ahead have to be met from the Italian mines. Opinion has been expressed in reliable quarters that, under the circumstances, still further and appreciable increases in quotations are to be feared.

Pharmaceutical Research in Industry

An interesting editorial article in a recent issue of the "Journal of the American Medical Association" drew attention to the part played by the leading pharmaceutical houses in research work. The report states that:—

"Within the past few years, leading corporations in the pharmaceutical industry have developed great laboratories to be devoted mainly to research. Several years ago Eli Lilly & Co. and Merck & Co. dedicated, with impressive ceremonies, well equipped laboratories for promotion of original investigations. Early in October the Abbott Laboratories and E. R. Squibb & Sons dedicated two large buildings. In the dedication of these laboratories many leaders in the field of scientific research, in medical education and in medication organisation in the United States co-operated.

"But a few decades ago the suggestion that a pharmaceutical house might spend vast sums of money on medical research, some of it of the type called 'pure' research, would have been laughed to scorn. Perhaps it would be folly to suggest that the great laboratories of research now associated with practically all the great pharmaceutical houses of this country have been built wholly out of philanthropic motives or out of that innate curiosity which animates the medical investigator. In these times competition is keen. Whenever a new product is discovered in any field, every pharmaceutical corporation endeavours to develop a product exclusively its own and preferably one for which claims may be made beyond those acceptable for the products manufactured by others. Thus the research laboratory may be expected from time to time to announce notable improvements over new products as rapidly as they come into use."

In Great Britain research has been carried out in special laboratories for many years. Some of the names come readily to mind. The Wellcome Foundation, Ltd., whose founder, the late Sir Henry Wellcome, pioneered several of such laboratories now associated with the Wellcome Research Institution, The British Drug Houses, Ltd., Evans Sons Lescher & Webb, Ltd., May & Baker, Ltd., Boots, Ltd., and others. It may indeed be said that pharmaceutical research is in these days becoming more and more a matter for industry, as may be gathered from the papers presented to the British Pharmaceutical Conference by wholesale houses with research departments.

First Schedule Poisons in Hospital Wards

OUR attention has been called to the statement (not in THE CHEMIST AND DRUGGIST) that "Medicines dispensed for a particular in-patient which are included in the First Schedule to the Poisons Rules may be kept in the ward medicine cupboard. They need not be kept in the poisons cupboard with other First Schedule substances." This is not in accord with the specific requirement of Rule 28(3) that "In every institution, every substance included in the First Schedule to these rules which is stored in the wards must be stored in a cupboard reserved solely for the storage of poisons and poisonous substances," i.e., it must not be kept in the same cupboard as non-poisonous medicines. The importance of this provision to the hospital pharmacist arises from Rule 28(4), which requires that all places in which poisons are stored must be inspected at regular intervals of time, not exceeding three months, by a pharmacist or other responsible person appointed for the purpose. The necessity of ensuring strict compliance of separation of poisonous and non-poisonous medicaments in hospital wards is evident from Rule 27 (4) (b), which provides that the container must bear a distinguishing mark or other indication showing that the (First Schedule) poison "is to be stored in a cupboard reserved solely for the storage of poisons." The general practice in hospitals is to keep all First Schedule poisons (whether for stock or individual use) in a poison cupboard in each ward. Many institutions have adopted the recommendation of the Guild of Public Pharmacists to have two poison cupboards in each ward, one for internal medicines and another for preparations for external use.



THE London section of the British Industries Fair, 1939, opens at Olympia, W.14, and Earls Court, S.W.5, on February 20 and remains open until March 4. The Fair will be open to trade buyers from 9.30 a.m. to 7.30 p.m. daily. Admission is by trade buyer's badge (price 2s.), obtainable at the entrances and available throughout the period of the Fair, or by the buyer's business card. The public will be admitted daily, on payment, from 4.30 p.m. to 7.30 p.m., except on February 25 and March 3, when they will be admitted throughout the day. The main sections of interest to the drug and allied trades are situated at Olympia, and it is satisfactory to note, from the arrangement of the stands, that the promoters have been able to place the chemical, perfumery and chemists' supplies, plastics, scientific instruments, and brushware sections in a compact group that should prove advantageous to sellers and buyers alike. The chemicals section is in its usual favourable position practically opposite the Addison Road entrance of Olympia (i.e. the nearest entrance to the railway station), and the innovation of placing the perfumery and chemists' supplies section immediately behind this is welcome as showing recognition of the growing importance of this branch of the industry and as acknowledging its fundamental connexion with the basic industry of chemical raw materials. In this respect it is worth recalling that attention was drawn in these columns on the occasion of the last Fair (C. & D., February 19, 1938, p. 215) to the advisability of some such re-grouping as has now been adopted. The chemical section is again under the auspices of the Association of British Chemical Manufacturers, which has an office on stand A643, at which literature will be distributed and inquiries answered as to sources of supply. The Association's main Directory, 1939 edition, and Fine Chemicals Directory will be available, together with samples of the Association's regular publications, the latest edition of the Directory of the British Chemical Plant Manufacturers' Association, and information in regard to affiliated associations. Advertising for the Fair has been heavy, culminating in the issue during the week before the opening of 21,000 posters, 200,000 folders, 100,000 cards, 3,000,000 poster stamps, 21,000 showcards, 3,600 wind-screen bills, etc. A Post Office cancellation stamp drawing attention to the Fair will appear on more than 200 million letters and parcels. In the succeeding paragraphs are given advance notes on the exhibits, compiled from information supplied by the exhibitors. It should be pointed out that the grouping adopted (DRUGS, CHEMICALS AND PROPRIETARIES; TOILET PREPARATIONS AND REQUISITES; DRUGGISTS' SUNDRIES AND RUBBER WARES; AND MISCELLANEOUS) in no way corresponds to the classification system adopted by the promoters of the Fair. In the fourth group (Miscellaneous) are placed mainly goods which may be useful or valuable to retailers or manufacturers in their own businesses.

Drugs, Chemicals and Proprietaries

Albright & Wilson, Ltd.

A 665

A small volume describing the products of this company is available at the stand. The exhibit has been arranged to represent some of the more important uses of the firm's products in industry, as, for example, in the bakery trade (acid calcium phosphate, acid sodium pyrophosphate, tartaric acid); for water treatment (sodium metaphosphate, di- and tri-sodium phosphate; a new development is the so-called "threshold" treatment, in which small quantities of sodium metaphosphate are used to prevent deposition of calcium carbonate in heating waters containing temporary hardness); in textile and laundry processes; for bottle and dish washing, and for industrial and domestic purposes; special

interest has recently been shown in tetra-sodium pyrophosphate used in soap powders, for prevention of "lime scum"; in the foodstuffs, cosmetics and textile industries (alginates; sodium alginate is being used in medicinal and cosmetic jellies and in the creaming of rubber latex); and in the plastics industry.

A. Boake, Roberts & Co., Ltd.

A 626, A 641

A wide and varied range of fine chemicals and essential oils, of which the firm are the sole manufacturers, is shown at this stand, including musk ambrette, ketone and xylol; geraniols; citronellol; heliotropin; ionones; eugenol; iso eugenol; linalols; linalyl acetates; synthetic menthol. Other exhibits include intermediates (the most important recent introductions are catechol and aceto acetanilide, now offered at a price to compete with imported material; also shown are ethyl aceto acetate and its homologues; benzoic anhydride; paraldehyde; methyl bromide and propiophenone); solvents, plasticisers, gums and resins (ethyl, butyl and amyl acetates, tri-cresyl phosphate, dibutyl phthalate, ethyl and butyl acetyl ricinoleates, Abrac ester gums, Abralac synthetic resins, and Brax, a new water-soluble resin); driers, metallic soaps and metallic salts (formates, acetates, oleates, stearates, linoleates, etc., derived from the various metals, guaranteed to contain a definite metal content, and available in fused or precipitated form). Special attention is drawn to aluminium and calcium stearates for the preparation of greases and water-proofing materials, and to the soaps derived from triethanolamine, ammonia and the alkali metals; emulsifiers for technical and cosmetic purposes (the Abracol range includes equivalents of tegin, protegin, tegacid, tegostearate, tegomuls, emulgator, etc., for which the firm hold English manufacturing and selling rights). The firm are exhibiting pharmaceuticals, particularly menthol pure, B.P., eucalyptol, paraldehyde, ammonium chloride, potassium sulphate and potassium chloride; flavouring essences, food colours, food preservatives, chemicals for foodstuffs and oleoresins for the mineral-water, confectionery, bakery, etc., industries; perfume bases, cosmetic materials and deodorants.

Boots Pure Drug Co., Ltd.

A 666

The central feature of the display is a glass screen indicating stages in the manufacture of fine chemicals from coal tar, with vases of fine chemicals below. The chemicals include potassium permanganate, mandelic acid, dichloramine-T, chloramine-T, saccharin, soluble saccharin, aspirin, potassium iodide, chloroform, sulph-anilamide, acriflavine, neutral acriflavine (eulflavine), proflavine, magnesium carbonate, and bismuth salts.



Another section is devoted to medical products, of special interest being Hepastab No. 2, a concentrated sterile solution of the anti-anæmic factors of mammalian liver; Gastomag (magnesium trisilicate); and Rusven (Russell's viper venom). A range of sex-hormone preparations includes Antostab (gonad-stimulating), Physostab (gonad-stimulating), Ovostab (ovarian), and Luteostab (corpus luteum). Antiseptics shown include Supersan; Burnol (neutral acriflavine in an emulsified cream



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for first-aid treatment); Ammoket (elixir of ammonium mandelate), and Neoket (compound mandelic-acid granules). The manufacture and testing of insulin-Boots is illustrated by photographs, transparencies, and photomicrographs, while protamine insulin (with zinc) suspension-Boots is displayed alongside charts comparing its relative hypoglycaemic effect with that of insulin.

The British Drug Houses, Ltd.

A 647

The exhibit includes medicinal chemicals, pharmaceutical preparations, chemicals for use in research and analysis, and apparatus. A unique exhibit is a specimen of crystalline vitamin-A naphthoate, the production of which has been facilitated by development of the molecular-distillation process. Specimens of crystalline vitamin D₂ (radiostol or calcirol), vitamin C (ascorbic acid) and nicotinic acid are to be seen, together with vitamin-containing preparations such as Avoleum (vitamin A), Radiostoleum (A and D), Radiostoleum emulsion with vitamin C, Radiostol solution and pellets (D), Radio-malt (A, B₁, B₂ and D) and Multivite pellets (A, B, C and D). A section devoted to sex hormones includes Serogan (a preparation of the predominantly follicle-stimulating hormone from the serum of pregnant mares); Gonan (predominantly luteinising substance from urine of pregnant women); Oestroform (oestrogenic hormone of ovary); Progestin B.D.H. (hormone of the corpus luteum) and Stilboestrol B.D.H. (synthetic oestrogen α -diethyl-stilboestrol). Anahemin (the anti-anæmic principle of liver) is again exhibited, together with protamine insulin (with zinc) suspension, insulin, thyroxine, acetylcholine and pituitary extract. Mandelic acid and its sodium and calcium salts are shown in a "medicinal chemicals" group, as well as preparations of these compounds for use in urinary antiseptics (Mandelix ammonium mandelate elixir; and Mandecal calcium mandelate powder). Other chemical products shown are Caprokol (a preparation of hexyl-resorcinol); sulphonamide-P, B.D.H.; acriflavine; Bisoxyl (a sterile suspension of bismuth oxychloride); sodium antimonyl tartrate; glycine (amino-acetic acid); phenolphthalein; cinchophen; hippuric acid and hippurates; alkaloids; citrates; barium sulphate for radiological diagnosis; tetraiodo-phenolphthalein; symmetrical ureas such as antrypol and S.U.P. 36; contramine; manganese butyrate; chaulmoogrates; morrhuates; medicinal dyes in grades suitable for local or intravenous use; proflavine, euflavine, auramine, brilliant green and congo red. B.D.H. vaccines for human and veterinary use are again shown, supplemented by immunological products, of which placental globulins (human) for the modification, prevention and treatment of measles and diphtheria prophylactics deserve special mention. The display includes specimens of β -indolyl-acetic acid and other substances which have been shown to stimulate and control the growth and division of cells and formation of roots in plants. The instrument section includes an all-purpose Lovibond Comparator designed for pH determinations and other routine colorimetric tests.

W. J. Bush & Co., Ltd.

A 620

Messrs. Bush are showing varieties of essential oils distilled in this country, including lavender, peppermint, celery, caraway, dill, clover, nutmeg, together with those produced in other parts of the British Empire. Also on show is a range of fine chemicals, pharmaceuticals and intermediates, among them being the fine chemicals (coumarin, vanillin, heliotropine and propiophenone); pharmaceuticals (beta-phenyl isopropylamine and its salts, sulphanilamide, salicyl ethyl carbonate, guaiacol and its carbonate); intermediates (acetoacetic derivatives of aniline, toluidine, chlor- and dichloraniline, anisidine). The exhibit is completed with displays of floral essences, soap perfumes, cosmetic and perfume bases and compounds, harmless food colours, fruit essences, pure fruit concentrates and juices.

Gas Light & Coke Company

A 610

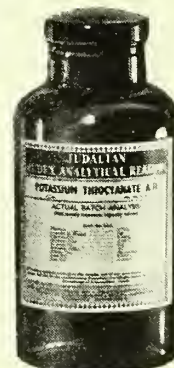
The company's exhibit consists of about forty specimens of their range of tar, ammonia and cyanogen products, including creosote, pitch, tars, Brotox (non-toxic tar), Becmulse tar emulsion; benzols, toluols, solvent naphthas, xylols, heavy

naphtha; crystalline phenol, cresylic acids, naphthalenes, pyridines and ammonia products.

General Chemical & Pharmaceutical Co., Ltd.

A 671

A range of analytical reagents that are unique in this country in having the actual batch analysis of the material (as distinct from only the maximum amounts of impurities, some of which may be present in amounts differing widely from the maxima) stated on the label, are to be seen at the stand of this company. The series is marketed under the registered trade mark Judactan, and it is claimed that the purity of these reagents is, in almost every case, higher than is guaranteed in the specifications of competitors. No batch analysis is printed until the company's control-laboratory analysis has been confirmed by an independent analyst. A uniform type of amber bottle has been selected, with moulded screw cap and an inert liner, that ensures an air-tight seal when the cap is replaced. The firm's Judex series of analytical reagents, indicators, absorption indicators and oxidation-reduction indicators, and organic reagents for "spot" tests are also shown. To popularise the use of the organic "spot-test" reagents, in the commercial manufacture of some of which they were pioneers, the makers offer at a special price a set of thirty tubes containing 1 gm. each of the more important reagents.



Hopkin & Williams, Ltd.

A 668

A display of the AnalaR laboratory chemicals is a main feature. (The production of these reagents is in the hands of Hopkin & Williams, Ltd., and The British Drug Houses, Ltd.) These are supplied with analytical particulars on each label, and packed in a distinctive bottle with moulded screw-cap. The company has produced a series of micro-analytical reagents, the purity of which is in accordance with the standards described by Pregyl and other workers. The publication "Organic Reagents for Metals," which is on show, is now in its third edition; it describes the use of thirty-eight reagents with a bibliography relating to each. Organic reagents made available since the publication of this monograph include resacetophenone (dihydroxyacetophenone), for iron; and dimercaptothio-diazole, for bismuth. Indicators comprise a special section. In addition to oxidation-reduction, pH and adsorption indicators, a new group (fluorescent indicators) is displayed for the first time. These are recommended for the determination of acidity or alkalinity of strongly coloured solutions. In the past the only method of titration of such strongly coloured solutions has been potentiometrical; fluorescent indicators enable the potentiometric equipment to be dispensed with and permit direct titration. Also shown are a pure ceric ammonium sulphate that is readily soluble in cold dilute sulphuric acid, edestine, and a fluorescent cadmium tungstate.

Howards & Sons, Ltd.

A 648

Among the products which are being shown at this stand is Nilox Ester Oil Sr., for use in the worsted and rayon industries. This is claimed to be superior to the best olive oil in performance, with the advantages of uniform quality and stable price. It is a synthetic oil free from mineral oil, and without tendency to oxidize or cause rancidity. Howards' sodium lactate (technical 80 per cent.), used as a glycerin alternative in calico printing, possesses greater hygroscopic power than glycerin, yet has a lower (and stable) price; other uses are in the finishing of certain classes of textiles and as a plasticiser for casein. Diterpene, a high-boiling, practically odourless, viscous liquid that dries by oxidation to give tough films, is useful as an antiskinning agent in certain types of inks, and also for promoting flow in high-temperature stoving lacquers. For use in the cellulose and synthetic-resin lacquer trade, Messrs. Howards have put on the market two



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crystalline plasticisers of a high degree of purity available at a lower price than hitherto. Also demonstrated at the stand are Sextone B, ethyl lactate, Sextol, Barkite B, and Sextol phthalate (solvents and plasticisers).

Imperial Chemical Industries, Ltd.

A 627

The main I.C.I. stand in the chemical section at Olympia follows the policy introduced last year of showing one major product at a time; this year the theme is ammonia. The exhibits are in six main groups, illustrating the uses of anhydrous ammonia; liquid ammonia; ammonium compounds; ammonia oxidised to nitric acid; ammonia converted to cyanide; and finally ammonia converted to urea. Sub-displays in these exhibits deal with water sterilisation; preparation of rubber latex; refrigeration; metal production (ammonia gas); toilet ammonia preparations (liquid ammonia); dry batteries, fireproofing, baking and galvanising chemicals (ammonium compounds); the use of nitric acid derivatives in the preparation of anaesthetics, and in the manufacture of glass, enamel, paint and explosives; fumigation with hydrocyanic acid; and the use of urea in the manufacture of plastics and pharmaceutical chemicals. There are also I.C.I. stands at the Earls Court (Rexine) and Birmingham (metals and de-greasing plant) sections of the Fair.

Johnson & Sons Manufacturing Chemists, Ltd.

A 621

Fine chemicals for use in photography, including metol, amidol, acid pyrogallol, hydroquinone, chlorquinol, glycin, Meritol, together with compounds made to specific formulas and packed in containers of convenient sizes for use by the various branches of the photographic trade and in industry, are exhibited at this stand. An important feature of the display is a range of fine-grain developers in various forms for use by professional and press workers and miniature-camera owners. Most items in this series have Meritol included in the formula. There is also to be a range of Scales brand fine chemicals. Part of the exhibit consists of a range of packed developers in liquid and powder form, each package, in either tins or bottles, containing the whole of the components required for making quantities of solution ranging from 4 oz. (packet developer) to 40 gallons (as used by the trade). Constant Endura is a developer that shows no exhaustion until it has developed about 320 spools ($3\frac{1}{4} \times 2\frac{1}{4}$) to the gallon. Meters are provided for this developer giving accurate time for development for all makes of films. A striking exhibit is made of silver nitrate crystals, of which Messrs. Johnsons have been manufacturers since photography was introduced. Their product is known throughout the world. In an adjoining case will be seen large blocks of crystal pyro in its last stage of manufacture and before being crushed for packing. In the setting of the stand photographic devices have again been used.

Monsanto Chemicals, Ltd.

A 625, A 642

Prominence is given to a display of phenols and cresols, together with pure toluol, naphthalene and similar coal-tar isolates. There follows a section devoted to disinfectants and germicides, from products of the sheep-dip type to chlorinated phenols; included in this section are Santaxate and Cresantol 20s. Chemicals for the rubber industry are again a feature, and several new accelerators have been added to the already lengthy list of these products manufactured by the company. Fine chemicals take up the remainder of the display. Among these are aspirin and salicylates, phenacetin (of which Monsanto are the only British manufacturers), vanillin and Ethavan. In this section also are shown products of particular interest to the paint, lacquer and varnish, and plastics industries. The basic material in this sub-section is phthalic anhydride in the form of white flakes; phthalic acid is also offered. Developments from phthalic anhydride are the phthalic esters which supply the plasticizers required in so many modern processes, and benzoic acid and sodium benzoate.

Phil-Sano, Ltd.

A 672

Phil-Sano specialities exhibited include aspirin tablets (a bonus offer is in operation during the period of the Fair); toilet

and household soaps (a special service is offered to hotels, etc.); nasal-catarth compound; "Phil-Sano's Safe Way to Slimming"; and "Phil-Sano's Unique Carpet Soap." For retailers, the R.W.P. range of aspirin tablets (in entirely new packs) and the R.W.P. series of packed pills and tablets are displayed, as well as a number of products for which the firm acts as agents (Ava beauty and complexion specialities, Dols' Volatalse flannel; Besorbon snuff; Chosen China tea; Iglo-dine, etc.).

South Metropolitan Gas Company

A 611

The South Metropolitan Gas Co.'s products department is represented by a display of coal-tar and ammonia products, including road tar; crystalline dry neutral ammonium sulphate; disinfectant fluid; black varnish for protective treatment of outdoor ironwork; creosote; solid smokeless fuels for hot-water installations; anthracene; pyridine; sulphuric acid; sulphate of iron; coal-tar pitch, etc.

Spencer, Chapman & Messel, Ltd.

A 644

At the stand of this company are to be seen specimen bottles of sulphur trioxide; sulphuric acid 20 per cent., 40 per cent., 60 per cent. and 80 per cent.; battery acid; and pure and commercial hydrochloric, nitric and sulphuric acids.

Thomas Tyrer & Co., Ltd.

A 624

Examples typical of the range of fine and technical chemicals manufactured by this company are exhibited at the stand. They include a representative selection of inorganic chemicals conforming in purity to the specifications of the B.P. and B.P.C. (bismuth salts, scale preparations, citrates of soda and potash, etc.). Technical chemicals shown include standardized products in use in the paint, rubber, photographic, cosmetic and other industries.

Whiffen & Sons, Ltd.

A 667

Since nicotinic acid was exhibited at the British Industries Fair, 1938, its production and therapeutic application have considerably developed. Probably no treatment of pellagra would to-day be considered without it, and although its actual function in nutrition is not yet fully understood, it is clearly associated with carbohydrate degradation. Nicotinic acid is one of the products exhibited, together with di-iodoform (ethylene tetraiodide), a pale yellow, odourless crystalline product that is used as a substitute for iodoform; sozoiodole compounds (salts of di-iodo-*p*-phenolsulphonic acid that are employed as dusting powders in diphtheria, cervical catarrh and tuberculosis of the nose and throat); *n*-butyl bromide, *n*-propyl bromide and iso-propyl bromide (convenient for use in synthesis for the introduction of these alkyl groups; they are fairly heavy refractive liquids, all with boiling point up to about 100° C.); ethyl- and phenylmercurics (outstanding are the phenylmercuric chloride, nitrate and acetate); tribromophenol (in the form of crystalline needles, almost insoluble in water); and Naturit, a manure manufactured from entirely organic materials.

Williams (Hounslow), Ltd.

A 622

A display of dyes forms the chief feature of the exhibit. Dyes for leather, colours for synthetic resins, cellulose lacquers, oil and spirit varnishes, inks, wood-stains, soaps, and candles are included. Nigrosine (spirit, water and fat soluble) and Nigrosine base are well to the fore and Induline base and Typogan dyes, as used in the printing-ink industry, are also on view, together with a range of oil-soluble dyes. Harmless confectionery colours supplied under a guarantee of purity include new colours such as sunset yellow FCF., brilliant blue FCF., ponceau SX., etc.

Toilet Preparations and Requisites

Abietsan Manufacturing Co., Ltd.

A 692

Flaroma eau de Cologne, lavender water and Devon violets perfume are shown in a variety of hand-painted presentation packs. Toilet Cologne in an attractive assortment of new



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containers, Flaroma concentrated water-soluble bath essences in pine and floral odours; bath salts (crystals and needles) in a range of packs, including wooden containers poked and hand painted, and Alpid pine bath salts in a 4-lb. octagonal decorated canister, are among other specialities exhibited. A talcum powder in a wooden veneered container, hand decorated, complete with puff, is featured and an entirely new introduction is the Flaroma lavender water in bottle like an old-fashioned picture frame and hand painted in place of label, while a prominent place will also be given to bath salts in novelty containers with *appliqué* designs.

British Essence Co., Ltd.

A 694

The Mayflower series, comprising perfumery, toilet waters, hair preparations, cosmetics, skin foods, cold creams, bath salts and coffrets is featured at the stand. Among the coffrets are special new introductions for the 1939 Christmas season. A prominent item is the family series of creams (approximately 1 lb. in each). The company has recently opened a factory exclusively for the manufacture of bath salts, pottery and bath-salt packings. Another feature will be a range of Bohemian-glass decanters of eau de Cologne or lavender water.

Cosmetic Yeast, Ltd.

A 712a

The chief feature at the stand is a display of Yeast-Pac, a face pack containing Derma yeast, live yeast chemically adapted for external application. This is stated to encourage the healthy working of the sebaceous glands. Subsidiary to this display is yeast soap, a medicated alkaline soap suggested for treatment of acne.

Old Song Perfume Co.

A 710



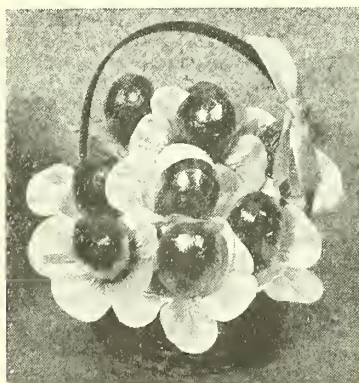
The display is devoted to the Londonderry Air Perfumery series—perfume; bath and toilet soaps; bath cubes and talcum powder. The perfume is issued in bottles of five sizes in emerald-green caskets, as shown in the accompanying illustration.

Papier Poudré, Ltd. A 713

Three series of perfumery products are shown. The Papier Poudré specialities are, of course, prominent. A second series is the Sandal-Cedar moth bags, now packed in silk bags, in display boxes of three dozen, at the same price as formerly. The third series, Cottage Garden, includes perfumes, pot-pourri sachets in a variety of new designs and new materials, and an attractive selection of pot-pourri jars.

Promedico Products, Ltd.

A 690



Perfumery novelties and bath preparations shown at this stand include the Jean Sorelle compressed bath salts combined with artificial flowers, twigs, etc., or presented as bunches of grapes; bath salts in sycamore-veneered drums and waxed boxes finished with silk ribbons; novelty figures containing bath soap and bath-salts tablets; pine-needle essence and preparations; Redux herbal tea and Reduxol slimming foam bath specialities.

Schick Dry Shaver (England), Ltd.

A 1220

A complete range of electric shavers is on show, comprising the new Colonel Schick, standard Schick, ladies' Shavette, selection of low-voltage shavers, service kit, world travellers' kit, shaver kit for universal use, and an array of dry-shaving accessories. The new Colonel Schick shaver has a modified motor with a higher standard of performance than the existing model. It is supplied in a white bakelite case with beige-coloured rubber-covered cord, and packed in tan-coloured genuine cow-hide leather.

A. Simpson

A 725 and A 727

The stand is devoted to a display of shaving brushes in numerous designs, with handles of various materials and colours, including the latest chromium-and-gold finish. Specially featured are drip-stand shaving brushes specially designed for quick drying, the improved Tourist stand brush, together with new shapes in the Bajer, Sinue, Alex Sim and Simbal series, shown for the first time at this year's Fair.

Druggists' Sundries and Rubber Wares

Addis Brushworks

A 726

The display comprises ranges of toothbrushes with bone and celluloid handles of longhead and shorthead type, also novelty toothbrushes for children (Mickey Mouse and Snow White figures), one example in this series having a whistle in the handle. Nail brushes with backs of coloured celluloid and other non-flam plastic material, including the new registered design Everfast; the No. 88 denture brush; Flat-Pack cloth brushes and compact toothbrushes for use in travelling; and face powder and cosmetic brushes in various sizes and colours complete the display.

British Patent Perforated Paper Co., Ltd.

B 983

A display of paper towels in rolls and in interleaved form is a prominent feature of the stand, and an opportunity is afforded to make a practical test under working conditions on the stand itself. The towels answer to the requirements of the new Factory Act, are economical and clean in use and eliminate risk of contagion. Toilet paper in rolls, cartons, interleaved and flat packets, including the nationally advertised Bronco and Capensis varieties, is shown. Ruled or plain coils for cash tills, cash registers and adding machines; and thief-proof toilet-roll holders and interleaved toilet-paper cabinets complete the exhibit.

P. B. Cow & Co., Ltd.

A 693

In a display covering the requirements of several trades Li-Lo air beds, pillows and cushions, hot-water bottles, rubber mats and gloves are prominent. A new model Li-Lo is being shown for the first time.

Edward Hack, Ltd.

A 673

New items featured include Ritzprins, a branded aspirin tablet, sales of which will be confined to chemists, distribution





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being made through wholesale houses. The black bakelite case containing fifty tablets can be put to other uses after the tablets have been used. Iodine and styptic pencils are supplied in an attractive showstand as shown at the Fair, and lengths of 1-in. and $\frac{1}{2}$ -in. plaster are placed around the bottle, replacing the small length of $\frac{1}{4}$ -in. plaster formerly placed around the styptic. Hax-Aid, a miniature outfit for first-aid treatment of cuts, etc., is presented in a case similar to that used for the aspirin tablets.

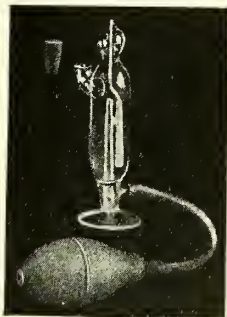
Drayton PaperWorks, Ltd.

B 922

The exhibit comprises toilet papers, including rolls, cartons, zig-zag and flat packets; roll-paper holders (Hopking's patent, including new models, chromium plated, to suit all wrapping situations); plain and printed counter rolls, including a range of one-, two- and three-colour designs; paper coils for adding machines, teleprinters, etc.; paper bags and carrier bags, plain and printed, for all trades; commercial and publicity printing (brochures, showcards, bottle-wrappers, etc.).

Gardner Co. (London), Ltd.

G 1524



Atomisers are the main subject of display. The range includes Atomist sprays for perfume; all-glass, chromium-and-glass and nickel-and-glass throat and nasal atomisers; spraying devices for hair lotions and brilliants; and powder blowers. The example illustrated is an all-glass nebuliser with rubber bellows and cork. Also shown at the stand are the Pot-à-Fleurs series of bath salts in novelty packs.

Soho, Ltd.

A 686

The display forms part of the combined exhibit of the Scientific Instrument Manufacturers' Association. On show is the Soho Myna all-distance folding camera for pictures size $3\frac{1}{2}$ by $2\frac{1}{4}$ in. The model can be used equally well for landscapes, portraits and close-up pictures and needs no portrait attachment; it is fitted with a single meniscus lens, has a simple and effective shutter, giving time and instantaneous exposures, brilliant view-finder for horizontal and vertical pictures; and swing-out cradle to facilitate loading of the film. The body is of metal (black crystalline finish) and the fittings are chromium plated. The Soho Myna S.K. 12 camera is this year's introduction. It has all the points mentioned and, in addition, it is fitted with a doublet lens, has three points of focus, and a self-erecting front which springs the bellows into position by dropping the baseboard. This model will be ready in time for the Whitsun trade. Other cameras shown are the Cadet in three models and the Soho reflex for all standard sizes. For chemists who supply optical goods there are Bijou, Gaiety and Tivoli theatre glasses, the Sportsman spectacle binocular and a full range of Kershaw prismatic binoculars.

Reliance Rubber Co., Ltd.

A 719

Prior to the opening of the present winter season five new designs of seamless moulded hot-water bottles were introduced, and the range available for general trade use now comprises no fewer than twenty-six different models, which are displayed. New bottles are the Good Companion and Flaxman, chemists' own, 924 leather and 906 web. A medallion engraving of a pestle and mortar in olden-day design is affixed to the chemists' own model. The 922 Cosy Cot—a baby-sized bottle—is on show, with engraved nursery-rhyme pictures upon it. As a means of stimulating interest in seamless moulded hot-water bottles an advertising novelty in the form of a miniature hot-water bottle was recently introduced, and is shown. This little bottle is beautifully engraved and will appeal to any child for use in a dolly's cot. It is not for sale, but any *bona-fide*

buyer of hot-water bottles—whether Reliance or of a competitive make—will be supplied with one free of charge upon application. In addition to hot-water bottles the stand will

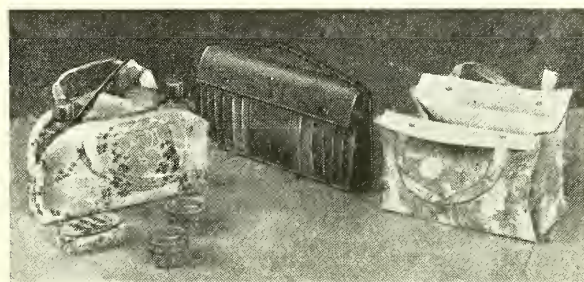


include bathing caps, sports wares, tobacco pouches and rubber mouldings for the surgical equipment, hardware and furnishing trades.

Solport Bros., Ltd.

A 675

Several novelties and new packings for the Portia toiletries and Nerissa powder puffs are exhibited. The Nerissa swans-down and fur puffs have new boxes in a cream and gold series to replace the present shagreen packings. A new range of



handkerchief puffs in the latest colours has been introduced, together with new packs and novelties in the range of velour puffs. Thistledown and compact puffs (of which the makers claim to be the manufacturers of a large proportion of those used in rouge boxes in this country) will be prominently displayed. The Beauty Queen face pads constitute a series introduced to the trade just prior to Christmas, 1938, and shown for the first time at a Fair. The success of these absorbent face pads in their transparent trays and rolls has led the makers to put heavy reserve stocks in hand to meet the anticipated demand. Felt corn plasters are offered for the first time in twelves on a "silent salesman" card. The plasters, by an ingenious method of packing, are not upset from their position by removal of others. Lotion pads and Portia non-flam and fabric eyeshades are shown, the former in transparent wrappers and the latter including an unbranded lightweight range at competitive prices. Sponge bags, fitted and unfitted holdalls appear in new designs and qualities. Three examples are shown and an illustrated price list is available. The Watersprite non-stretch face cloths are presented in new two-colour printed cellophane wrappers.

Spencer Bros.

G 1525

Rubber-proofed toilet bags, beach bags, holdalls and sponge bags in exclusive designs and materials, powder puffs, face cloths and toilet novelties comprise the range of articles shown.



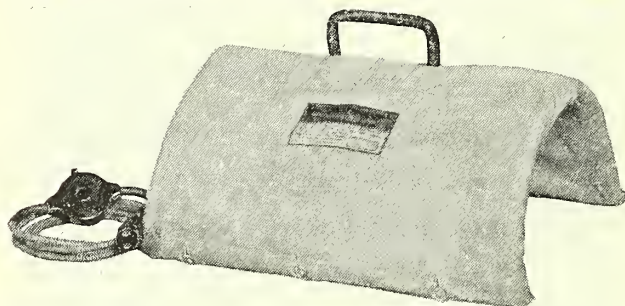
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Thermega, Ltd.

A 702

Electrically heated pads, blankets, etc., including this year a half-hoop heater for massage work, for placing over an arm or leg (as illustrated), are featured at the stand. A similar



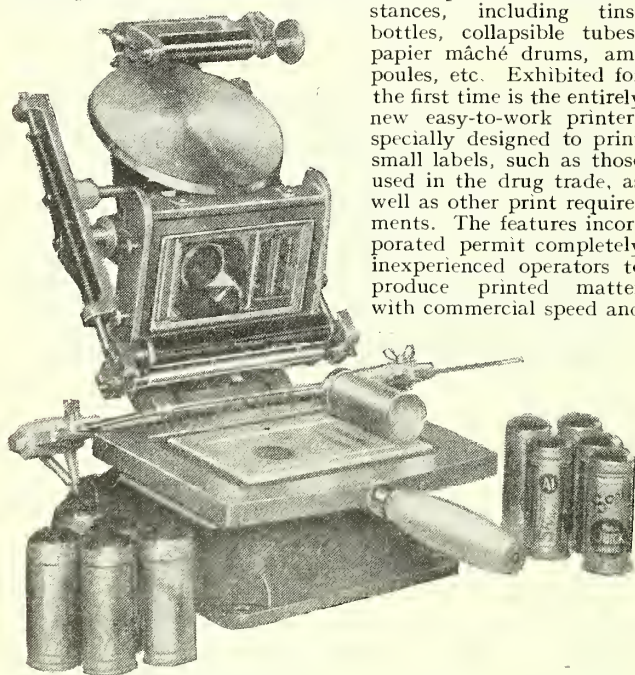
heater is available for placing over a baby's cradle; this is claimed to be particularly beneficial in cases of premature birth.

Miscellaneous

Adana

B 930

Shown at the stand is a complete range of the Adana printing machines, including the improved Printall offset machine, which prints on containers of various shapes, sizes and substances, including tins, bottles, collapsible tubes, papier mâché drums, ampoules, etc. Exhibited for the first time is the entirely new easy-to-work printer, specially designed to print small labels, such as those used in the drug trade, as well as other print requirements. The features incorporated permit completely inexperienced operators to produce printed matter with commercial speed and



perfection. The machine is illustrated. A new process that will appeal to those whose problem is indelible printing on glass containers is the Adana Dry-Etch, which dispenses with the use of fluid acids, gives absolute permanency and clearer definition.

British Emulsifiers, Ltd.

F 1369

At the company's Olympia stand are featured the Bel Empire and Bel Jubilee cream-makers, packed in bright self-display cartons. Other exhibits are the Bel juice-extractors and Bel rotary whisks, and other domestic appliances.

E. K. Cole, Ltd.

A 756

Prominent among the exhibits on this stand, which is in the Plastics Section, are the Thermovent electric convection

heaters, which are specially suited for stockroom and shop use under the terms of the recent Shops Act, as they provide evenly distributed warmth with a complete absence of intense local heat—a factor often responsible for stock deterioration and discoloration of adjacent surfaces. A patented "duct-within-a-duct" system insulates the element from the outer casing, which remains at air temperature. Both inset and floor-standing versions, with moulded casings or panels in walnut, black and other colours, are shown.

Samuel Jones & Co., Ltd.

B 947 and B 943

The stand is devoted to Butterfly brand stationery products, including Christmas gift tags, seals, labels, tape; Gumstrip mending tape; passe-partout; albums; photographic mounts; corners and other album accessories; decorative transfers; household papers, including moth-fumigant and lavender papers; Gumstrip sealing tape and container; Balestrip sealing tape; sealing machines for tapes; parcel carriers; printed Gumstrip for parcel advertising; adhesives.

National Cash Register Co., Ltd.

A 782

Included in a range of National cash registers shown are models with audit strip ruled to provide easy dissection of takings under several headings (such as departments or assistants). A special model for shops under management is fitted with a device that ensures that the manager or other responsible person writes down the amount of money in the cash drawer before he prints or reads the total recorded by the cash register, thus preventing forged balances and disclosing mistakes and carelessness.

Thermos (1925), Ltd.

H 1662

While the nature of the glass vacuum vessel limits designs of the Thermos flasks and jugs, some new examples of an original design have been prepared with the assistance of a silverware craftsman. These are on show. Another feature of special interest is the vacuum vessels used in catering on airliners. As a result of trials undertaken by a member of the firm in the company's kitchen, it has been proved possible to serve complete hot meals by means of vacuum containers. Members of the Royal family have, it is stated, enjoyed the fruits of this investigation. Picnic cases are among other items exhibited.

Other Exhibitors

Among other exhibitors are JACK L. BARNETT, LTD., A 797 (confectionery jars; serving stands; also 4 in. by 1 in. glass sample-tubes with patent airtight rubber closures; new designs in perfume bottles); BLACKMORE PRODUCTIONS, LTD., D 1115 (vanity cases; powder, compact, rouge and mascara boxes; lipstick cases and metal bottle-caps for perfume bottles); BRITISH CELANESE, LTD., G 1507 (bottle-capping solution, transparent paper); DENNISON MANUFACTURING CO., LTD., B 932 (crepe papers, gift-wrapping materials, drinking straws of transparent material); ECONASIGN CO., LTD., B 980 (printing outfits for the production of showcards, posters, price tickets, etc.; film titling outfit for amateur cinematographers); JARRETT, RAINSFORD & LAUGHTON, LTD., F 1409 (powder boxes, lipstick cases, cosmetic containers for manufacturers; a range of British-made powder boxes for chemists; novelty powder holders, cosmetic containers and vanity boxes in a variety of finishes to compete with items previously made on the Continent); MARRIS'S, LTD., H 1617 and H 1606 (beauty boxes in enamel, leather cloth, fabric and leather; bottle sets; bottle holders; powder bowls; shaving outfits).

Exhibitors at the Birmingham Section of the Fair include the GENERAL ELECTRIC CO., LTD. (power plant; measuring instruments; lighting plant, including photographic studio floodlight); and ROWLANDS ELECTRICAL ACCESSORIES, LTD. (industrial, commercial and floodlighting fittings, including colour-corrected mercury lighting).

A Course of Photographic Studies

(Continued from THE CHEMIST AND DRUGGIST, February 11, p. 155)

VI—Developers and Development

IN processing there occurs a series of chemical changes which depend on well-established laws. One of the most notable is that "a rise of ten degrees may double or even treble the rate of a chemical reaction." This is a conservative estimate, hence precautions must be taken to see that the correct temperature is maintained. In cold weather, baths of correct temperature to stand tanks and dishes in will help, and frequent recourse to the thermometer is wise. Not less important is the concentration of solutions. If these are mixed outside, a reasonably accurate weighing apparatus is desirable, as are careful and clean habits in its use. Scale pans are prone to corrosion and verdigris may seriously interfere with photographic solutions. An easily read, strong and stable measure is invaluable, and a pipette should be of the safety type, to prevent passage of solutions into the mouth. Weights and measures often give trouble. Metric measures are easily confused with *avoirdupois*, but formulas are usually given in both, and in any case tables of conversion are easily found. Adapt the bottle sizes to the tanks and dishes used, draw up an "own book" of formulas with amounts appropriate to own needs, and labour is subsequently reduced by half. Never be mean about chemicals. They are relatively inexpensive compared with sensitive materials, and such meanness is a false economy, just as is using stale and out-worked solutions. Weights and measures need to be reasonably accurate. Next it is no use weighing accurately if half the chemicals do not go into solution; in making up powder mixtures, directions should be closely adhered to. Directions for mixing these formulas will give the necessary order for dissolving all the common reagents. First of all ascertain whether they dissolve best in hot, warm or cold water. Hot water is usually the best, but in some instances causes decomposition and must be avoided. Precipitates are dangerous, not only because they put some part of the formula out of action, but also because small solid undissolved particles are liable to bring disaster to a negative. So mix in the right order in clean beakers. Filter if necessary, use distilled or boiled water if necessary, and allow to stand for a little while after mixing. Handle chemicals with care: contact with crystals, powders or solutions does neither the person nor the chemical good. Use scoops reserved for each substance or carefully washed to avoid contaminating one chemical with another. It is a good habit to weigh out each amount on to a square of paper, or for large quantities a porcelain or metal container easily washable after use.

Developer Formulas

A developer, however obscure its action, is a substance which, in the presence of a latent image, will reduce the exposed parts of the silver halide in the emulsion to metallic silver in relation to the exposure given. In this sense "reduce" is a chemical term and refers to a process the opposite of oxidation, and is not to be confused with a cutting action on a negative; photographic density-reducers are actually chemical oxidisers. Now only certain substances can exert the action of reducing silver salts to silver. A large amount of chemical energy is needed to carry through this reaction before exposure. However, after exposure, the presence of a latent image aids the process and weak or less energetic reducers are able to complete the change. In fact, such weak reducers are carefully chosen so that they will reduce only those that have suffered light-action and leave untouched the unexposed. Thus is our negative produced. Since the process is so delicate and the action confined to only a few substances, it is obvious that conditions must be carefully controlled. This control must be exercised over the alkalinity of the solution. Almost all practical developers work in alkaline solutions, but degrees must be controlled and preferably invariable if consistent results are desired. Happily this is possible within the necessary limits. To the reducer (developing agent) need only be added an alkali or basic salt of a weak acid—with or without some weak acid—in specific amount. These salts split up in water—or

"hydrolyse"—then there is the slight fixed alkalinity which is required. In addition, a "restrainer" of some kind is needed to control the speed of development and a "preservative" to protect the easily oxidisable developing agent from rapid destruction by the oxygen of the air.

Constituents of a Developer Solution

Developing agents are available in some variety. Some of those in general usage include metol, hydroquinone, glycin, amidol, paraphenylene-diamine (commonly contracted to p.p.d.). Most of these derive from the benzene ring and are complex coal-tar products. They vary in characteristics, and are usually employed in mixtures as a compromise. For example, metol is energetic, the image appearing rapidly and building up slowly, while hydroquinone takes a longer time to appear but then gains more rapidly; a suitably balanced mixture containing varying proportions of these two is the basis of the very widely used M.Q. developer. Amidol is even more energetic than metol, so that alkali need not be used, but its limited keeping qualities restrict its uses to printing papers. Glycin, rather different in chemical structure from these three, has moderate energy, is non-toxic and keeps well. Paraphenylene-diamine is of exceptionally low energy, and because of this has found considerable use of late in fine-grain formulas; so low is its energy, however, that mixtures of it with metol or glycin are usual. To this list must be added a number of proprietary compounds of similar types but slightly varying characteristics. The alkalis for choice are similarly varied. Most vigorous are, of course, caustic soda and potash, but so powerful is their action that with the more energetic reducers sodium carbonate is generally used in preference—save in the maximum-energy developers used in process work. Caustic soda itself should be handled carefully; it dissolves with the evolution of much heat, is usually sold as sticks, and concentrated solution or solid particles should be kept from the skin, owing to its powerful degreasing action. Sodium carbonate—or "soda" as it is generally referred to—is far less energetic than caustic soda, so that far more than the equivalent weight is used. Sodium carbonate dissolves to give an alkaline solution which serves as the energiser for the developing agent. In less energetic developers still, sodium borate—or borax—may be used as it gives a solution of less strongly alkaline character. For solutions of constant low alkalinity small concentrations of alkali are not used, as might be imagined, but a technique of "buffering" is employed. This involves a delicate balance of a salt of a weak acid and a quantity of the acid itself. The resultant solution is largely unaffected by changes in the other contents of the developer solutions and maintains within reasonable limits its low alkalinity. Such a mixture may contain, for example, borax (and boric acid). The preservative in the developer performs a most important function. In its absence oxidation on exposure to air would be rapid (save with glycin), producing a dirty brown solution of greatly lowered efficiency. Dust particles hasten this deterioration. The addition of sodium sulphite in suitable amount retards this change enormously, seemingly by virtue of the fact that it is itself oxidised to sodium sulphate in preference to the developing agent, yet at the same time has no appreciable effect either on the latent image or unexposed silver halide. Sulphite, however, does dissolve the halides themselves in small quantities, a fact which is sometimes used to explain its action in heavily loaded, so-called fine-grain developers. In fact, however, many of the well-established practices of photography, such as these, are not yet completely understood and form the subject of conjectures which are very difficult of proof. A reducer which acts too energetically may indiscriminately change to silver both exposed and unexposed silver salts. This results in an overall density or "fog," and such development is always undesirable and may be disastrous. Addition of potassium bromide will easily weight the chemical balance, so that such action is impossible save where the

"development centres" of the latent image aid the reducing action of the developer. In this way the potassium bromide acts as a restrainer on the chemical action and prevents fog, with its attendant low contrast and degradation of the image. Also as the developer is used and the bromide content rises, a replenisher must be added to restore the balance. These reagents then constitute a developer formula—first the developing agent, next a controlled alkali to give a definite level of energy, then a preservative and finally a restrainer. The inter-proportions of these mainly determine, with the temperature and the emulsion characteristics, the behaviour of the developer obtained. Besides making sure, then, that the making up is accurate, chemicals of known purity and consistency must always be employed. In general it is sound practice to use the recommended developer for recommended times and temperatures, while recognising that many formulas belong to more or less definite groups or types. First of all is the ordinary M.Q. developer of maximum or normal energy. For maximum energy the alkali is caustic soda, and for normal energy sodium carbonate. The proportions of metol and hydroquinone (quinol) determine also within narrower limits the energy variation. Next come the borax type developers, with or without boric acid according as it is buffered or not. The energy level of these developers is lower, but the developing agents—generally a mixture of metol and hydroquinone—have to be in higher concentrations to give a reasonable development time. Even so, for a temperature of 65° F. longer and longer times of development nowadays, for the sake of greater fineness of grain, are becoming the rule. Lastly, as a group, there are low-energy developers, the so-called fine-grain type. For these more exposure of the sensitive material is needed for equal density, and they generally contain agents of the paraphenylenediamine type, used with or without metol or glycin. A fairly high proportion of sulphite is present. Particular formulas for which unsubstantiated and fabulous results are claimed contain various quantities of many odd chemicals, whose action is obscure if not indeed imaginary. In actual development the contrast can be varied by adjustment of the development times. The amount of the contrast depends on the emulsion properties, developer formula and development conditions. Generally, the gamma increases with temperature, with concentration, with agitation and with development time till it reaches a maximum value, approaching this more and more slowly. Further, the camera speed of the film is different for different developer formulas used at different temperatures for varying times. Generally, as the energy of the developer is decreased, increased exposure of the sensitive material is required. Thus a paraphenylenediamine developer requires often up to four times the exposure necessary for an ordinary M.Q. developer, and for a borax M.Q. type. As the temperature rises there is often an increase in speed, but optimum temperatures are determinable, and not all results are consistent. The statement that increased development time will increase the speed—or shorten the exposure needed for a given density range, contrast being disregarded—is to be viewed with suspicion, because the effect of increased contrast may sometimes simulate an increase in speed. Better printing results may result from this increase in development time, but faulty tone reproduction is almost sure to result from any under-exposure. It is unfortunate that, whilst over-exposure can within reason be dealt with, under-exposure rarely or never can. Finally, since precautions have been taken with regard to time, temperature and concentration, it only remains to agitate the developing solution adequately to ensure even development. A few experiments will easily show that contrast can be greatly changed by any variation in conditions of agitation and that consistency here plays a large part in success.

Graininess and Speed

Although the individual grains of silver are exceedingly small, in the developed negative they have the appearance of clumping together, thus giving a non-homogeneity to the resultant tones which is objectionable at much lower magnifications than that at which the grains are themselves visible. This graininess—misleadingly so-called, since it is not due to individual grain size—is a difficult and controversial problem. First and foremost the difficulty is that no agreed method of measurement other than simply classifying prints is available. In addition, the factors which may affect the graininess of a print are numerous, viz., emulsion type, degree of exposure, light-

ing, developer, negative contrast, time of development, enlarger system, degree of enlargement, contrast of paper, paper surface, development, final treatment. The most powerful factors under control are choice of a good emulsion and a suitable developer for it, and allaying to this careful exposure and sympathetic printing. The choice of negative emulsion is usually dependent on the nature of the work in view, and this itself is a factor which affects graininess, since the individual grain size tends to increase with greater emulsion speed. Here again there results a balance. The large-grained emulsions of extreme speed really require a fine-grain developer to give normal graininess, this in turn necessitates increased exposure and so the emulsion speed is effectively reduced. Similarly, one may use a fine-grain slow emulsion and develop it in M.Q. or borax M.Q. developer without loss of emulsion speed and obtain reasonable graininess again. Obviously where exposure is unimportant developing a fine-grain emulsion can be done in fine-grain developer, and an almost grainless result obtained; or where only speed matters a super-speed film can be developed in M.Q. at about 70° F., and maximum speed secured with maximum graininess. At present graininess must be expected with extreme speed. Only new emulsions can really give a clue to greater efficiency in this direction.

Stop Baths and Fixing

As previously stated, developing agents work in alkaline solutions. Obviously, then, a rapid and efficient way of cutting short a developing action is to put the film or plate into an acid stop bath. This is usually 5 per cent. acetic acid, but may very well be combined with the fixing bath by addition of potassium metabisulphite to the hypo.

Sodium thiosulphate or "hypo" is the general fixer in use today. It has the property of dissolving away the unexposed silver halide without affecting the silver image. It is not the only salt possessing this quality, but by far the cheapest. Since it crystallises easily it can be prepared in a pure state without much difficulty. It dissolves with the absorption of heat. Its action on the silver halides is most rapid on the chloride and least on the iodide, therefore generally negative emulsions take longer to fix than papers. The use of dirty or exhausted hypo baths is a false economy, more so than with developer. Incorporated with the hypo may be potassium metabisulphite for a non-hardening acid bath; but most often acetic acid and alum are used to give both a stop and a hardening action on the negative.

Washing and Drying

When fixation is complete, thorough washing must be given to the film. Any traces of hypo will in time attack the finely divided silver in the image and obliterate it. Under unfavourable conditions anything up to two hours may be necessary in running water, particularly in the case of paper prints. Pure commercial alcohol may be used to facilitate rapid drying if desired. Throughout, the handling must be scrupulously clean; no solid particles or dust must be allowed near the surface of the emulsion. This is less dangerous after hardening but still to be avoided. The rate of washing is largely dependent on the diffusion of hypo from the interior of the emulsion outwards. This is greater with efficient agitation and largely independent of the quantity of water passing through the dish. With paper prints, frequent complete changes are effective, each giving, if time is allowed, a partition of the remaining hypo between emulsion and water. Theoretically, not all the hypo can ever be eliminated, but in practice the amount can be reduced below the danger level without much difficulty. After complete washing it is best, with a previously moistened clean chamois pad or viscose sponge, to remove the surplus water from both sides of film or plate. No dust should be present on the sponge or scratches will result. Any such particles may be removed by a jet of water from the tap. Well sponged films should be dried at a reasonable temperature—warm if the film is previously hardened, and too long a drying time will result in great chance of dust contamination. Another advantage of wiping is that the chance of white marks due to salts in the wash water is eliminated. Careful and reasoned handling is all that is necessary to ensure success in handling emulsions during their processing. The reactions and principles involved are most elementary, but the possible points of failure are legion.

(To be continued)

Medical Abstracts

Value of Common Cold Vaccines

THE value of vaccine therapy in common colds is reviewed by Embleton ("Practitioner," December, p. 725), and the possible reasons for the lack of success in immunisation are discussed. Prophylactic immunisation against the common cold, the author states, has not achieved the success attendant on inoculation against the enteric group. Many large scale experiments have, in fact, shown that a vaccine has been valueless. It has, however, been observed that whereas many successes can be claimed, there are a number of cases where prophylactic treatment has proved a failure, and bacterial vaccines have not been scientifically proved as effective measures in this connexion. The first reason for their lack of success is the fact that the infective agent is a virus and the bacteria only hold a secondary place. Furthermore, it is not certain to what extent the powers of resistance are lowered by the virus or if these differ markedly in individuals. Another important factor is that of basic immunity. It has been shown that a high degree of resistance against diphtheria can be induced with modified diphtheria toxin in persons possessing a certain antibody content or basic immunity, but in those in whom antibody is deficient a satisfactory response may be difficult or impossible. Such a state, it is believed, probably exists with regard to catarrhal bacteria. A third factor which must be taken into consideration is the value of the immunising substances in the vaccine. Every bacterial culture does not necessarily constitute a good vaccine. The vaccine is liable to be produced from cultures which have undergone much sub-cultivation, and have thus become liable to antigenic degeneration. A further point of importance is the difficulty of immunising during an epidemic. The use of even a small dose may lower the response of the subject, allowing invasion of an infective agent. A fifth factor is an attempt made to immunise unsuitable cases, e.g., in vasomotor rhinitis or persons with a serious metabolic disorder. These foregoing factors no doubt account for a great deal of the lack of success reported with catarrhal immunisation. As regards vaccines, many modifications have been suggested to those originally devised for this form of therapy, the idea of these modifications being that, if the vaccine can be rendered less toxic, larger doses can be used. The author, however, believes this to be a false conception, as it is not a greater quantity of bacterial substances that is required, but more of the antigenic factor. The search for outstanding antigenic strains is what is required and this is now being done. There appears to be no doubt that immunity can be achieved by the use of oral vaccines, but the response is more irregular than by subcutaneous injection, 300 to 400 times larger doses being required for immunisation. With regard to the duration of immunity, patients have reported that this persists for as long as one and a half to two years after a single course of vaccine. This, the author states, may be true, but it is unusual for a response to last so long. On the average it is probably better to have two courses in the year, when colds are not so prevalent, that is, September and May, and some authorities even advocate inoculation every three months.

Insulin in Cutaneous Conditions

THE beneficial results attending the use of topical applications of insulin in persistent cutaneous conditions reported at the beginning of last year have been confirmed by further trials on a series of thirty-three cases (Leyton, "Medical Press and Circular," December 21, p. 564). The author points out that the cutaneous use of insulin has definite limitations, but it is possible to say now what type of case will benefit, and if treatment is confined to these conditions, uniform success should be achieved. A synopsis of the cases treated with insulin applications shows that in twenty-five patients treated for septic cutaneous conditions, the lesions were healed in twenty cases, and in three were improved, while in five patients treated for varicose ulcers, three healed and two improved. In his account of the case reports, Leyton gives details of a patient who had fallen and grazed his hands a month before examination. The injuries had become chronic septic areas, which at times discharged pus, and then apparently healed over, but the superficial skin died again, leaving a raw area underneath. This had continued for a month, and paraffin and

acriflavine dressings alternately, with hot fomentations, did not appear to promote healing. Three septic areas of a similar type were present, and a pustular exudate was forming on the surface of each. On one area a dressing of insulin ointment was applied. On a second, a dressing of an aqueous solution of insulin (10 units per c.c.) was applied, and changed every twenty-four hours. On the third, to begin with a solution of equal pH to the insulin, next hot fomentations, then paraffin and acriflavine. The condition did not improve with any of these, but continued to discharge pus. The lesion treated with insulin ointment and insulin dressings commenced to heal at once no further discharge taking place, and at the end of six days the normal skin had formed. The area treated with the paraffin and acriflavine, however, was still exuding pus, and the surrounding skin was unhealed, and was similar to the condition before treatment. Other cases for which details are given include the following. A man was suffering from an electric burn, which did not heal with ordinary dressing, but with insulin ointment the area healed in four days. Another patient had a septic arm to which hot fomentations had been applied with little result, and severe pain persisted. After the application of insulin ointment relief from pain was immediate, and the area healed in ten days. A third case was that of a varicose ulcer on the leg, which was resistant to all treatment. Insulin ointment was applied, and relief from irritation was immediate; after three weeks the area had healed to a quarter of the original size. Another patient had suffered from acne for three years, and the face was covered with spots. Insulin applied in a special vanishing cream base effected definite improvement. The author concludes that insulin applied topically has a definite healing effect in all chronic septic cases, and infected areas clear up more quickly than with any other dressing tried at the same time. There is an additional action which gives the patient relief from pain.

New Books

Lupton, A. W., M.C., Ph.C. *Aids to Forensic Pharmacy*. 6½×4. Pp. viii plus 260. 3s. 6d. Bailliere, Tindall & Cox, 7 and 8 Henrietta Street, London, W.C.2. [This is the second edition of Mr. Lupton's book which belongs to the pharmacy section of the Students' Aid Series. In this edition numerous details of new legislation and modifications of the existing laws which have come into operation during the past two years have been included. The book has been considerably extended, and individual paragraphs have been re-written in cases where certain points may have afforded difficulty to students. The contents include the Shops Act, Registration of Business Names Act, Medicines Stamp Acts, Pharmacy Acts, 1852 to 1908, and Pharmacy and Poisons Act, 1933, Dangerous Drugs Acts, National Health Insurance Act, 1936, Therapeutic Substances Act, 1925 (and Regulations, 1931 and 1937), Venereal Diseases Act, 1917, and several others. In an addendum new poisons amendments issued since publication which come into force on January 1, 1939, are included. The book, therefore, may be looked upon as being completely up to date.]

Dilling, W. J., M.B., Ch.B. *The Pharmacology and Therapeutics of the Materia Medica*. 7½×5. Pp. 600. 10s. 6d. Cassell & Co., Ltd., La Belle Sauvage, London, E.C.4. [This book, which is now in its fifteenth edition, was formerly known under the title "Materia Medica and Therapeutics." The change has been in response to the increasing emphasis now placed on the therapeutics of the subject. The book has been entirely re-set in a larger type, and there is a slight change in the format so as to make the page slightly less crowded. Dr. Dilling's work is intended to provide for students of medicine and medical men in general practical concise modern information on pharmacological actions, methods of administration and relative therapeutic values of drugs used in the treatment of diseases or their symptoms. Many new remedies and methods of treatment have been described in the edition, including the uses of mandelic acid salts in urinary infections, retarded insulin in diabetes, ovarian hormones in menstrual disorders, nicotinic acid in pellagra, sulphanilamides in streptococcal infections, viper venoms in persistent hæmorrhage and others.

World Trade in Olive Oil

THE output of olive oil may vary considerably from one season to the next, the olive crop being much affected by unfavourable weather. Definite information on the output in Spain, which is the chief producing country, is not available after 1935-36. According to trade estimates, the Spanish production rose to a peak of over 9½ million cwt. in 1937-38, as compared with 7 million cwt. in the previous season. The output of Italy, Greece, Portugal, Tunis and Turkey increased substantially in 1937-38 and world production, estimated at 23½ million cwt., was the largest since 1929-30. A heavy reduction in the output of most countries is forecast for 1938-39. World production, in million cwt., is as follows:—

	1930-31	1931-32	1932-33	1933-34	1934-35	1935-36	1936-37	1937-38 (prov.)
Spain ...	2.2	6.9	6.9	6.1	6.2	8.7	(a)7.1	(a)9.8
Italy... ..	2.4	4.4	4.1	3.2	4.3	4.1	3.1	5.4
Greece ...	1.9	2.0	2.6	2.1	2.4	1.7	1.4	3.5
Portugal ...	0.4	1.3	0.8	1.5	0.4	1.0	0.6	1.3
Tunis ...	0.4	0.6	1.1	1.2	1.1	1.2	0.3	1.1
Turkey ...	0.5	0.2	0.7	0.4	0.6	0.6	0.6	0.8
Syria and Lebanon	0.2	0.2	0.1	0.3	0.2	0.2	0.2	0.4
Algeria ...	0.3	0.5	0.3	0.2	0.3	0.3	0.1	0.3
French Morocco	0.4	0.2	0.2	0.1	0.2	0.1	0.2	0.2
Palestine ...	—	—	—	(b)	(b)	0.2	0.1	0.2
France ...	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.1
Jugo-Slavia...	(b)	0.1	0.1	0.1	0.1	0.1	(b)	0.1
Tripolitana ...	(b)	0.1	0.1	0.1	0.1	0.1	(b)	0.1
Total ...	8.8	16.6	17.2	15.4	16.0	18.5	13.9	23.3

(a) Approximate figure based on trade estimates. (b) Under 50,000 cwt.

Exports

World exports of olive oil averaged less than one-quarter of the total production between 1930 and 1935. The position in later years is not known, as export figures for Spain are not available after 1935. Exports from the producing countries were exceptionally large in 1930, but thereafter fell steadily until 1934. An increase in shipments in 1935 was followed by a substantial decline in 1936, owing to the short crop and the disturbance of Spanish trade. A slight increase in exports appears to have taken place in 1937. French Morocco appeared as a large exporter of olive oil in 1937. The increase in exports from France and Italy was offset by a fall in shipments from Tunis and Algeria. Exports from Tunis have declined steadily for the last five years.

It should be noted that imports into France and Italy are considerable, and in the case of France are regularly larger than exports. Both countries import unrefined olive oil and export mainly refined oil. World exports, in thousand cwt., were as follows:—

	1930	1931	1932	1933	1934	1935	1936	1937
Spain ...	2,104	1,848	1,239	849	1,031	1,222	(a)	(a)
Italy ...	1,426	1,156	891	687	474	381	275	402
France ...	227	200	181	190	181	248	256	364
Tunis ...	836	246	406	1,110	949	812	519	325
Algeria ...	483	163	360	164	129	515	233	171
Syria and Lebanon	57	64	65	5	15	125	158	169
French Morocco	(b)	(b)	(b)	(b)	(b)	(b)	10	143
Greece ...	142	145	548	457	133	219	158	132
Portugal ...	72	36	77	65	60	52	74	66
Turkey...	93	359	49	279	153	132	14	63
Palestine ...	10	16	14	6	5	10	9	28
Jugo-Slavia ...	3	2	1	2	5	9	4	15
Total of above countries	5,453	4,235	3,831	3,814	3,135	3,725	(a)	(a)

(a) Not available. (b) Less than 500 cwt.

Imports

Imports into the United States, the chief market for olive oil, fell substantially in 1936 and again in 1937. Imports into Argentina have shown a marked downward trend since 1930, and in recent years other South American markets have also imported reduced quantities. Italy, Switzerland and Germany imported larger quantities than in 1937 as compared with the

previous year, but imports into France, Portugal and the United Kingdom fell heavily. World imports, in thousand cwt., were as follows:—

	1930	1931	1932	1933	1934	1935	1936	1937 (prov.)
Empire Countries								
United Kingdom ...	194	178	220	242	205	221	228	147
Australia (a) ...	23	13	19	22	25	24	29	29
Canada... ..	64	56	51	41	54	66	34	28
Union of S. Africa	(b)	3	3	4	4	5	5	6
Palestine ...	18	1	9	42	37	43	1	3
Foreign Countries								
United States (c) ...	1,463	1,086	1,173	1,102	909	1,110	807	672
Italy ...	1,184	1,613	746	731	558	551	215	446
France ...	646	418	497	502	506	563	622	(e)301
Argentina ...	1,167	819	711	741	453	422	301	240
Switzerland (d) ...	137	123	107	133	115	118	139	153
Cuba ...	187	129	158	170	164	178	127	(f)
Germany ...	65	54	49	49	54	66	94	99
Brazil ...	164	52	104	95	96	81	90	59
Uruguay ...	167	135	95	117	82	82	72	43
Norway ...	53	26	76	63	44	65	64	49
Poland ...	82	75	79	72	85	95	84	43
Egypt ...	(h)	(h)	(h)	67	66	71	63	33
Portugal ...	237	63	29	81	49	120	170	18
Chile ...	60	47	16	7	6	25	10	13
Czechoslovakia ...	21	18	17	15	16	10	12	11
Soviet Union ...	9	3	9	9	8	2	5	8
French Morocco	8	20	12	64	42	18	10	6
Sweden (g) ...	8	6	7	7	7	8	7	6
Belgium ...	15	11	12	12	10	8	9	5
Austria... ..	(b)	(b)	4	3	3	4	3	4
Netherlands ...	2	2	4	3	3	4	3	2
Denmark ...	3	2	2	2	2	2	2	2
Total of above countries	5,977	4,953	4,209	4,396	3,603	3,968	3,206	2,643

(a) Years ending June 30. (b) Not available. (c) Imports entered for consumption. (d) Includes almond oil and oleine. (e) Estimated net weight. (f) Not yet available; assumed same as previous year for total. (g) Includes small quantities of sesame oil. (h) Complete figures not available.

Empire Imports

The Empire import balance for olive oil has fallen notably in the last three years. The United Kingdom is by far the largest Empire market, and the reduction in its imports in 1937 combined with a marked increase in the export balance of Palestine, the only olive-growing country in the Empire having an appreciable export trade, caused the Empire import balance to fall to the lowest level in the period under review. Australian imports have shown an upward trend, but imports into Canada declined after 1935. Imports, in thousand cwt., were as follows:—

	1930	1931	1932	1933	1934	1935	1936	1937
Net imports into								
United Kingdom ...	187	173	214	236	201	221	227	145
Canada... ..	64	56	51	41	54	66	34	28
Australia(a) ...	23	13	19	22	25	24	29	29
Union of S. Africa	(b)	3	3	4	4	5	5	6
Palestine ...	7	—	—	36	32	33	—	—
Eire ...	2	2	2	3	3	4	2	2
New Zealand ...	3	2	3	3	3	4	3	(c)
Malta ...	5	2	2	2	2	2	1	1
Net exports from								
Palestine ...	—	15	6	—	—	—	6	25
Empire import balance	291	236	288	347	324	359	295	189

(a) Years ending June 30. (b) Not available. (c) Not yet available; assumed same as previous year for total.

* Vegetable Oils and Oilseeds. (Imperial Economic Committee.) Stationery Office. Price 2s. 6d.

CALENDAR OF EVENTS.—The Travel and Industrial Development Association of Great Britain and Ireland, 6 Arlington Street, London, S.W.1, have sent us a vest-pocket collection of events for 1939. This calendar contains a diary of events in all parts of the British Isles and a summary of facts likely to help visitors to this country. There are French, German, and Spanish editions, and it is sent to representatives of the British Government all over the world and to shipping companies, agents, hotels and libraries.

Trade Report

Where possible scales of prices of chemicals are given for bulk down to small quantities. Prices recorded for crude drugs, essential and fixed oils and coal tar products are for fair sized wholesale quantities. Qualities of chemicals, drugs, essential and fixed oils, etc., vary, and selected brands or grades would be at higher values

28 Essex Street, W.C.2, February 16

THE HOME TRADE demand continues fairly good, but generally orders are restricted to limited quantities. Shipment business is still disappointing. The general tone, particularly where natural products are concerned, is very steady. Although business has shown no great expansion as yet, it is generally recognised that a further improvement in the political outlook, with a promise of steadier conditions, would bring about a general revival of trade. In the PHARMACEUTICAL CHEMICAL markets the trade is fairly satisfactory, with seasonal lines meeting with good business. The makers of MERCURIALS have advanced their prices on the basis of an increase of sixpence; this move is on account of the further big advance in metal. There is no change in BISMUTH SALTS and QUININE SALTS.

Crude Drugs

A rather poor week is reported in most products, but a few lines have livened up a little. The tone in this market is particularly steady and spot stocks of many items are at a low level. Spot stocks of AGAR are now restricted; shippers are rejecting off-bids for new crop. Very firm conditions are noted in CURAÇAO ALOES; export demand has increased, suggesting that London is now the main source of supply. No shipment offers. Shippers notify they will not be able to quote new crop BUCHU before March. Some descriptions of CARDAMOMS are slightly easier for shipment. The first fishing results from Lolofen show an unusually heavy yield of COP-LIVER OIL. Inquiry for DERRIS ROOR has slackened. ERGOT is steady, modest inquiry. West African GINGER shows further weakness. All descriptions of HONEY are quiet, but fully steady. HYDRASTIS is quoted cheaper on a dull market. Matto Grosso IPECACUANHA is steady. A better business on the London market in Japanese MENTHOL and the shipment market is firmer. A further advance of 4 dollars is recorded in the shipment price for Spanish-Italian MERCURY. Editorial comment on p. 184. The modest stocks of RHUBARB on spot are firmly held; no shipment offers. SENEGA has been dull and is not so firm. Plenty of inquiry for new crop Alexandrian hand-picked SENNA pods; arrivals are still awaited.

Essential Oils

General business in these products has been on a little better scale this week, but one or two weak features are noted. Holders of spot stocks of ANISE (STAR) tend to cut their prices slightly to secure orders, which are not very prolific. The Consortium shipment quotation for new crop BERGAMOT is unchanged. A fair business in CAJUPUT recorded. Japanese and Chinese white CAMPHOR is nominal, with bulk supplies exhausted and no shipment offers. A very fair business in small lots of CARAWAY is noted. The demand for CASSIA remains quiet. Java CITRONELLA is still quoted at low values, but there is little or no interest shown. CLOVE has been selling well of late. Shippers are only quoting March-April dispatch for Australian EUCALYPTUS and their prices are well maintained. Bourbon GERANIUM is steadier at the source. Rather more doing in JUNIPER BERRY. Sicilian new crop hand-pressed LEMON for shipment is reported to have sold in fair quantity and mostly at keen prices. The price for Californian cold-pressed LEMON has advanced sharply; the distilled oil is unchanged, and sales of this product continue quite good. Brokers report shipment quotations for new crop French Guinea ORANGE are firmer. Japanese PEPPERMINT shows an improvement, with active market business; shippers appear to be very firm.

Exchange Rates on London

The following is a list of the chief Continental and other exchange rates at the opening on Thursday morning:—

Centre	Quoted	Par	February 9	February 16
Amsterdam ...	Fls. to £	12.107	8.69	8.72
Berlin ...	Mks. to £	20.43	11.67	11.68
Brussels ...	Belgas to £	nominal	27.70	27.78
Copenhagen ...	Kr. to £	18.159	22.40	22.40
Lisbon ...	Esc. to £	110	110	110
Madrid ...	Ptas. to £	25.24½	nominal	nominal
Milan ...	Lire to £	92.46	89	89
Montreal ...	Dols. to £	4.86½	4.70½	4.70½
New York ...	Dols. to £	nominal	4.68½	4.68½
Oslo ...	Kr. to £	18.159	19.90	19.90
Paris ...	Fr. to £	124.21	177	177
Prague ...	Kr. to £	164.25	137	137
Stockholm ...	Kr. to £	18.150	19.40	19.40
Warsaw ...	Zloty to £	43.38	24½	24½
Zurich ...	Frs. to £	25.2115	20.70	20.65

Bank rate 2 per cent.

Pharmaceutical Chemicals, etc.

THE rather better tone in the market is being maintained. Makers' prices for mercurials were advanced on the basis of 6d. per lb., due to the sharp advance in metal.

ACETANILIDE.—Limited spot demand: B.P. crystals and powder quoted at 1s. 7d. to 1s. 10½d. per lb., as to quantity.

AMIDOPYRINE.—Dealers' prices are keen: crystals, two cwt., 9s. 4d.; one cwt., 9s. 8d.; less than one cwt., 10s. per lb., with powder 2½d. per lb. extra.

AMMONIUM ICHTHIOSULPHONATE.—Scale of prices is unchanged; one cwt., 1s. 6½d., in 14-lb. tins; 1s. 8d. in 1-lb. tins; 1s. 10d. in 8-oz. tins; and 2s. 1d. per lb. in 4-oz. tins.

ASPIRIN.—Makers' scales of prices continue steady at the recent reduction:—

In containers	lb.	2 lb.	4 lb.	7 lb.	14 lb.	28 lb.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
1 lb. and under 4 lb. ...	3 3	3 1½	—	—	—	—
4 lb. and under 7 lb. ...	3 2	3 0½	3 0½	—	—	—
7 lb. and under 14 lb. ...	3 1	2 11½	2 11½	2 10½	—	—
14 lb. and under 28 lb. ...	3 0	2 10½	2 10½	2 9½	2 9½	—
28 lb. and under 1 cwt. ...	2 11	2 9½	2 9½	2 8½	2 8½	2 8
Not less than 1 cwt. ...	2 7½	2 6	2 5½	2 5½	2 5	2 4½
Not less than 5 cwt. ...	2 7	2 5½	2 5½	2 4½	2 4½	2 4
Not less than 10 cwt. ...	2 6	2 4½	2 4½	2 3½	2 3½	2 3

The quotations for aspirin, powder and tablets, are subject to the following conditions:—Buyers not to resell any quantity at prices or terms below the scale for such quantity current at the time the resale is made, and, if he converts the aspirin into tablets, not to sell any quantity of tablets at prices or terms below the scale for such quantity current at the time when he sells the tablets.

BARBITONE.—Limited spot inquiry: spot, two cwt., 8s. 11d.; 56 lb., 9s. 2d.; less than 56 lb., 9s. 5d. per lb.

BENZOIC ACID (B.P.).—Average business at former values: five cwt., 1s. 7½d.; one cwt., 1s. 8d.; smaller parcels, from 1s. 9d. to 2s. 2d. per lb., ex store, as to quantity.

BISMUTH SALTS.—Makers' home trade and export scales of prices for these salts continue steady:—

	Net Monthly Account			Net 14 days	
	Under 4 lb.	4 lb. and under 8 lb.	8 lb. and under 28 lb.	28 lb. and under 1 cwt.	Not less than 1 cwt.*
Carbonate ...	s. d. 8 6	s. d. 8 0	s. d. 7 3	s. d. 6 9	s. d. 6 6
(Home Trade only)					
Citrate ...	11 10	11 4	10 7	10 1	9 10
Nitrate Cryst. ...	6 8	6 2	5 5	4 11	4 8
Oxide ...	12 11	12 5	11 8	11 2	10 11
Salicylate ...	10 0	9 6	8 9	8 3	8 0
Subchloride ...	12 8	12 2	11 5	10 11	10 8
Subgallate ...	9 8	9 2	8 5	7 11	7 8
Subnitrate ...	7 10	7 4	6 7	6 1	5 10

Contracts are booked for 1 cwt. and upwards for delivery over three months and are subject to a rise and fall clause. A rebate of 3d. per lb. is allowed on sales of not less than a cwt. (assorted if required) provided delivery is completed within three months. All deliveries ex contract are sold on net cash 14 days' terms.

BORIC ACID (B.P.).—Makers' prices continue steady: granulated, £30 10s.; crystals, £37 10s.; powder, £38 10s.; extra fine powder, £40 10s. per ton, in 1-cwt. bags, carriage paid to buyers' works on 1-ton minimum. Commercial quality, £8 per ton cheaper for all descriptions.

BROMIDES.—Makers' scales of prices steady. POTASSIUM, B.P., five cwt., 1s. 8d.; one cwt., 1s. 9d.; 28 lb., 2s. per lb. SODIUM, B.P., five cwt., 1s. 10d.; one cwt., 1s. 11d.; 28 lb., 2s. 2d. per lb. AMMONIUM, B.P., five cwt., 1s. 11d.; one cwt., 2s.; 28 lb., 2s. 3d. per lb. net. Resale clause applies. 28-lb. parcels and one-cwt. cases free. Smaller quantities than 28 lb. at higher prices. Export quotations are maintained as follows: POTASSIUM, B.P., five cwt., 1s. 4d.; one cwt., 1s. 4½d. SODIUM, B.P., five cwt., 1s. 5d.; one cwt., 1s. 5½d. AMMONIUM, B.P., five cwt., 1s. 6d.; one cwt., 1s. 7d. per lb., f.o.b.

BUTYL CHLORAL HYDRATE.—Occasional spot business: spot, 14 lb., 8s.; 7 lb., 8s. 3d.; 1 lb., 8s. 6d. per lb., in 1-lb. bottles.

CAFFEINE.—The scales of prices for Continental materials continue steady, as follows:—PURE: bricks, less than 56 lb., 9s. 9½d.;

56 lb., 9s. 7½d.; one cwt., 9s. 5½d. per lb. Powder, less than 56 lb., 10s. 1d.; 56 lb., 9s. 11d.; one cwt., 9s. 9d. per lb. Anhydrous powder, less than 56 lb., 10s. 6d.; 56 lb., 10s. 4d.; one cwt., 10s. 2d. per lb. CITRATE: less than 56 lb., 6s. 6½d.; 56 lb., 6s. 5½d.; one cwt., 6s. 4½d. per lb. delivered United Kingdom, duty paid. Cases and 5-lb. tins free.

CHLORAL HYDRATE.—Steady at makers' prices; duty-paid crystals, in 14-lb. free containers, five cwt., 3s. 2d.; one cwt., 3s. 3d.; 28 lb., 3s. 4d. per lb.; 28-lb. jars one penny per lb. extra.

CITRIC ACID (B.P. CRYSTALS).—Continues unchanged: British material quoted at 1s. 0½d. per lb., less 5 per cent. discount, nominal and without engagement. Dealers' prices for imported material are competitive.

CREAM OF TARTAR.—Fair business reported: British material, 99 to 100 per cent., 92s. per cwt., less 2½ per cent. discount. Dealers' prices for foreign material competitive.

CREOSOTE (B.P.).—Market is rather dull: bulk quantities, in 25-kilo demijohns, 1s. 6d.; small parcels, 1s. 7½d. up to 2s. per lb., ex store.

EPHEDRINE.—Quantities appear to be quoted keenly in some quarters: Hydrochloride, B.P., quoted at about 6s. per oz. for minimum 1,000-oz. lots; small quantities, up to 7s. Pure alkaloid is quoted from 7s. 9d. to 8s. 3d. per oz., as to quantity.

GALLIC ACID.—Quoted unchanged: spot, one cwt., 3s.; 56 lb., 3s. 1d.; smaller parcels, up to 3s. 6d. per lb.

GUAIACOL CARBONATE.—Market remains quiet: 8s. 10d. per lb.; bulk quantities at slightly cheaper prices.

GUAIACOL (CRYSTALS).—Dealers' prices are steady: 14-lb. jars, 9s. 10d.; 7-lb. bottles, 9s. 10½d.; 1-lb. bottles, 10s. 3½d. per lb.

LACTIC ACID (B.P.).—Continues quiet: in carboys, 1s. 4d. to 1s. 5d.; in winchesters and bottles, 1s. 6d. to 1s. 10½d. per lb., as to quantity.

MERCURIALS.—Makers' prices for the salts have been advanced on the basis of sixpence on account of the recent advances in the cost of the metal. The new scales are as follows:—

	Less than 28 lb.	Not less than 28 lb.	Not less than 112 lb.
Ammoniated Lump B.P. (White Precip.) ...	s. d.	s. d.	s. d.
Powder B.P. ...	6 10	6 6	6 5
Bichloride Lump B.P. (Corros. Sub.) ...	7 0	6 8	6 7
Powder B.P. ...	6 1	5 9	5 8
Chloride B.P. (Calomel) ...	5 9	5 5	5 4
Red Oxide Cryst. B.P.C. (Red Precip.) ...	6 10	6 6	6 5
Levig. B.P.C. ...	7 11	7 7	7 6
Yellow Oxide B.P. ...	7 5	7 1	7 0
Persulphate White ...	7 3	6 11	6 10
Sulphide Black (Hyd. Sulph. cum. Sulph. 50%)	7 0	6 8	6 7
	6 11	6 7	6 6

Net. Strictly without engagement. Usual terms. Special prices for larger quantities and for contracts. The previous market alteration was on December 1, 1938.

METHYLATED SPIRITS.—Prices for all grades of industrial and pyridinised spirits reduced one penny per gallon, as from January 1. These prices will remain in force up to June 30, 1939:—

In One Delivery	Industrial Spirits				
	61 o.p.	64 o.p.	66 o.p.	68 o.p.	74 o.p.
500 galls. and upwards	1s. 3d. ...	1s. 4d. ...	1s. 5d. ...	1s. 6d. ...	1s. 8d.
100 " " under 500	1s. 5d. ...	1s. 6d. ...	1s. 7d. ...	1s. 8d. ...	1s. 10d.
30 " " " 100	1s. 7d. ...	1s. 8d. ...	1s. 9d. ...	1s. 10d. ...	1s. 12d.
10 " " " 30	1s. 9d. ...	1s. 10d. ...	1s. 11d. ...	1s. 12d. ...	1s. 14d.

In One Delivery	Pyridinised		Mineralised (Coloured Violet)	
	61 o.p.	64 o.p.	61 o.p.	64 o.p.
500 galls. and upwards	1s. 5d. ...	1s. 6d. ...	1s. 5d. ...	1s. 6d. ...
100 " " under 500	1s. 7d. ...	1s. 8d. ...	1s. 7d. ...	1s. 8d. ...
30 " " " 100	1s. 9d. ...	1s. 10d. ...	1s. 9d. ...	1s. 10d. ...
10 " " " 30	1s. 11d. ...	1s. 12d. ...	1s. 11d. ...	1s. 12d. ...

Industrial methylated spirits (toilet quality) 2d. per gallon above the prices quoted for industrial methylated spirits. Delivered free. Carriage also paid on returned empty packages. Terms, cash in one month, less 2½ per cent.

METHYL SALICYLATE.—Market steady, moderate business: spot, ten cwt., 1s. 1½d.; five cwt., 1s. 2d.; one cwt., 1s. 2½d.; less than one cwt., 1s. 3d.; small quantities, in bottles, up to 2s. per lb.

METHYL SULPHONAL.—Market has been dull: two cwt., 19s. 3½d.; one cwt., 19s. 9½d.; 56 lb., 20s. 2½d.; small parcels, up to 20s. 8d. per lb.

PARAFORMALDEHYDE.—Quoted unchanged: 100 per cent. powder, quantities, in kegs, 1s.; smaller parcels, from 1s. 1½d. to 1s. 6d. per lb., as to quantity.

PARALDEHYDE.—Limited inquiry: in carboys, quoted from about 1s. 2d., and in winchesters from 1s. 5d. to 1s. 6d. per lb.

PHENACETIN.—Average spot business, quoted unchanged: crystals or powder, bulk quantities, from 2s. 6d.; smaller parcels, 2s. 7d. up to 3s. per lb., as to quantity.

PHENAZONE.—Competitive spot quotations: crystals, five cwt., 6s. 9½d.; two cwt., 7s.; one cwt., 7s. 3d.; and less, up to 7s. 6d. per lb., with powder 2½d. per lb. extra.

PHENOLPHTHALEIN.—Not much inquiry about: two cwt., 2s. 9d.; one cwt., 2s. 10d.; 28 lb., 3s.; 14 lb., 3s. 1d.; 7 lb., 3s. 2d.; smaller parcels, up to 3s. 6d. per lb.

PHENYLETHYLBARBITURIC ACID.—Dealers' prices, in 2-lb. bottles are in the region of 16s. to 17s. per lb., as to quantity.

PHOTOGRAPHIC CHEMICALS.—Home makers' prices are as follows: AMIDOL.—28 lb., 8s.; 14 lb., 8s. 9d. net; 7 lb., 9s. 6d.; in free 7-lb. tins; under 7 lb., 12s. per lb., in free 1-lb. bottles, less 2½ per cent., monthly terms. CHLORQUINOL.—1-lb. bottles, 21s. per lb. GLYCIN.—7 lb., 10s. 6d.; 1-lb. bottles, 13s. 6d. per lb. HYDROQUINONE.—56 lb., 4s. 10½d.; 28 lb., 5s.; 14 lb., 5s. 3d.; 7 lb., 5s. 6d.; in 1-lb. bottles, 6s. 6d. per lb. METOL.—28 lb., 9s. 6d.; 14 lb., 9s. 9d. net; 7 lb., 10s. 6d., tins free; 3 lb., 12s., bottles free; 1-lb. bottles, 12s. 6d. per lb., bottles free, less 2½ per cent., monthly terms. ALUM (PHOTOGRAPHIC QUALITY).—1 cwt., 21s. per cwt.; 28 lb. for 6s. GOLD CHLORIDE.—15-grain tubes, 45s. per doz. MAGNESIUM POWDER.—10s. per lb. PARAMIDOPHENOL HYDROCHLOR.—8s. 6d. per lb., bottles free. POTASSIUM FERRI-CYANIDE.—14 lb., 2s. 2d.; 7 lb., 2s. 4d.; 1 lb., 2s. 6d. per lb. POTASSIUM METABISULPHITE.—One cwt., 8d.; 28 lb., 9d.; 14 lb., 10d.; 7 lb., 1s. per lb. PYROGALLIC ACID, CRYST.—One cwt., 7s. 9d.; 56 lb., 8s.; 28 lb., 8s. 3d. net; 14 lb., 9s. 9d.; less than 7 lb., 10s. 3d. per lb., less 2½ per cent., monthly account. Resale in small packages: 1-oz. bottles, 2s.; 4-oz., 5s. 3d.; 8-oz., 9s.; 16-oz. bottles, 16s. 1½d. each, less 3½ per cent. to the trade. RESUBLIMED.—1-oz. bottle, 2s. 6d.; 4-oz., 6s. 6d.; 8-oz., 11s. 3d.; 16-oz. bottles, 20s. 3d. each, less 3½ per cent. to the trade. SODIUM CARBONATE, RECRYST.—5 cwt., 12s. 6d. per cwt.; 1 cwt., 15s. 6d. per cwt.; 56 lb. for 11s. 6d.; 28 lb. for 6s. SODIUM HYPOSULPHITE, CUBES, CRYST.—5 cwt., 17s.; 1 cwt., 19s. 6d. per cwt.; 56 lb. for 11s. 6d.; 28 lb. for 6s. SODIUM SULPHIDE (PURE).—7 lb., 1s. 9d.; 1 lb., 2s. per lb., bottles and jars free. SODIUM SULPHITE, RECRYST.—One cwt., 21s. 6d. per cwt.; 56 lb. for 13s. 6d.; 28 lb. for 7s.

POTASSIUM PERMANGANATE (B.P.).—British makers' scale of prices for home trade is as follows: Not less than one cwt., 10½d.; not less than three cwt., 10d., in drums; not less than 5 cwt., 9½d. in 1-cwt. drums and 9½d. in 5-cwt. drums, net, delivered buyer's station, drums free. Technical or commercial quality, one cwt., 96s.; three cwt., 91s. 6d.; five cwt., 89s.; one ton, 86s. 6d. per cwt., in 1-cwt. drums.

POTASSIUM SULPHOGUAIACOLATE.—Remains dull: spot quotations steady at about 6s. 2d. per lb., as to quantity.

QUININE SALTS.—Convention prices continue steady: Sulphate, 2s. 3d.; bisulphate, 2s. 3d.; ethyl carbonate, 2s. 11d.; salicylate, 2s. 11½d.; hydrochloride, 2s. 10d.; dihydrochloride, 3s. 1½d.; hydrobromide, 2s. 10d.; dihydrobromide, 3s. 1½d.; valerianate, 3s. 9½d.; phosphate, 3s. 5½d.; hydrophosphate, 4s. 1½d.; alkaloid, 3s. 1½d. per oz., 100-oz. tins free, carriage paid on bulk quantities.

SALOL.—Dull and competitive: bulk quantities quoted from 2s. 2d. to 2s. 4d. per lb., as to quantity.

SANTONIN.—Not much inquiry for bulk quantities: bulk quantities, £10 5s.; and small parcels, up to about £12 10s. per kilog.

SODIUM BENZOATE (B.P.).—Business fair: five cwt., 1s. 3½d.; one cwt., 1s. 4d.; smaller parcels, from 1s. 5d. to 2s. per lb., as to quantity.

SODIUM DIETHYLBARBITURATE.—Inquiry is limited: spot, one cwt., 11s.; 28 lb., 11s. 3d.; 14 lb., 11s. 6d.; 7 lb., 11s. 9d.; smaller parcels up to 12s. 3d. per lb.

SODIUM SALICYLATE (B.P.).—Makers' scales of prices continue steady: home trade, crystals or powder, five cwt., 1s. 5½d.; one cwt., 1s. 6d.; 28 lb., 1s. 9d.; 14 lb., 1s. 10½d.; 7 lb., 1s. 11½d.; 1 lb., 2s. 4d. per lb.

TANNIC ACID (B.P. LEVISS).—Prices are well held at about 2s. 9d. to 3s. per lb., as to quantity.

TARTARIC ACID (B.P. CRYSTALS).—Quoted unchanged: British makers quote at 1s. 1½d. per lb., less 5 per cent. discount, dealers offering foreign materials at competitive prices.

TERPINEOL.—Convention scale of prices continues at the reduction recorded last week: ten cwt., 11d.; five cwt., 11½d.; one cwt., 1s.; smaller quantities, up to 1s. 4½d. per lb., net.

THEOBROMINE.—The new scales of prices for Continental material continue steady, as follows: Pure, less than 56 lb., 8s. 8½d.; 56 lb., 8s. 6d.; one cwt., 8s. 4½d. per lb. Soda sal., less than 56 lb., 6s. 10d.; 56 lb., 6s. 9d.; one cwt., 6s. 8d. per lb., delivered United Kingdom, duty paid. Cases and 5-lb. tins free. Smaller packings extra.

THYMOL.—Synthetic, fine white, one cwt., 6s.; 56 lb., 6s. 4d.; 28 lb., 6s. 9d.; less than 28 lb., 7s. 6d. per lb., tins extra; ex ajowan seed, one cwt., 8s. 5d.; 56 lb., 8s. 10½d.; 28 lb., 9s. 5d.; 14 lb., 10s. 6d. per lb.

VANILLIN.—Convention prices for home trade are unchanged: ex clove oil or guaiacol, five cwt., 11s.; one cwt., 11s. 1½d.; 56 lb., 11s. 3d.; smaller quantities, 11s. 6d. per lb.

Crude Drugs etc.

ACONITE ROOT.—Dealers are quoting spot supplies of Napellus at 110s. and Japanese at 77s. 6d. per cwt., ex store.

AGAR.—Spot supplies are now limited and held steady at former figures. Japanese shippers are maintaining their quotations for new crop and are reported to have refused near bids: spot, Kobe, No. 1, 3s. 8d. to 3s. 9d.; No. 2, 3s. 7d., and in very short supply. Yokohama, No. 1, 3s. 5d. per lb. Japanese shippers quote Kobe, No. 1, 3s. 4d. to 3s. 5d.; No. 2, 3s. 2d. to 3s. 3d., and Yokohama No. 1, 3s. per lb., c.i.f. Re-sellers: January-February, No. 1, 3s. 3d.; for February-March, 3s. 2½d. per lb., c.i.f., with good business reported.

ALOES.—There has been quite a good export demand from various parts of the world, and it is evident that London holds the bulk stocks; no shipment offers: Cape, spot, in boxes, 47s. 6d.; shipment, 43s. per cwt., c.i.f. Curaçao, spot, 180s. up to 190s. for delivery.

ANTIMONY.—Market is steady: Chinese, crude, spot, £36; shipment, February-March, £36, c.i.f. English regulus, £71 per ton, ex store.

BELLADONNA.—The feature of this market is the shortage of root with any available quoted at about 65s. per cwt.

BUCHU.—The spot demand continues limited to odd bales with prices about unchanged. Rounds, 1s. 2½d. to 1s. 4d., as to quality. Shippers state they will not be able to offer new crop before March despatch, and no price is at present indicated.

CAMPHOR.—A rather limited business, with quotations reported unchanged: Japanese monopoly BB brand, £7 10s. per 100 lb.; Japanese, natural, spot, tablets, 2s. 6d.; powder, 2s. 3d.; slabs, 2s. 2½d. per lb., ex store; shipment, tablets, 2s. 2d.; powder, 1s. 10½d.; slabs, 1s. 10½d. per lb., c.i.f. English refined flowers, one cwt., 3s. 1d.; 28 lb., 3s. 2d.; small lots, 3s. 3d. per lb. Transparent tablets, 4 oz., 8 oz. and 16 oz., 3s. 4d.; 1 oz. and 2 oz., 3s. 5d.; ½ oz., ¼ oz. and ⅓ oz., 3s. 6d.

CANTHARIDES.—Small spot sales only: Russia, 4s. 3d. to 4s. 6d.; Chinese, spot, 1s. 11d. per lb., as to quantity.

CARDAMOMS.—Not much life in this market and the forward position is not so strong: shipment, Aleppy greens, f.a.q. the season, 2s. 4½d., c.i.f.; Aleppy seed, 3s. 6d., c.i.f.; Mangalore seeds, 3s. 2d., c.i.f.; spot, Aleppy seed, 4s.; Mangalore seed, 4s. per lb. Aleppy greens, spot, 2s. 7d., ex store.

CASCARA SAGRADA.—A limited amount of smallish business reported, with values for all bark quite steady: spot, 1938 bark, 52s. 6d.; 1937 bark, 57s. 6d.; 1936 bark, up to 65s. per cwt., ex store, duty paid. No shipment offers from the source. One offer of 1937 peel from New York at 54s., c.i.f.

CHAMOMILES.—Dealers report a small inquiry, with values for all qualities of flowers very steady.

CLOVES.—Market is steady: Zanzibar, spot, 8½d.; shipment, February-March, 8d. per lb., c.i.f. Madagascar, in bond, 8d.; shipment, February-March, 6½d. per lb., c.i.f.

The landings of Zanzibar in London during the week ended February 11 were 38, and the deliveries *nil*, leaving a stock of 321. From January 1 to date the landings of Zanzibar have been 51 and the deliveries 48. Landings of Madagascar for the week ended February 11 were *nil*, and the deliveries 16, leaving a stock of 231. From January 1 to date the landings of Madagascar have been 21 and the deliveries 233.

COCOA BUTTER.—Market is steady: price English, 8½d. to 10d. per lb.; foreign, 7½d. to 9d. per lb., as to quantity and quality.

COCONUT (DESICCATED).—Rather quiet, market steady: spot, fine, 17s.; medium, 17s. 6d. per cwt.; shipment, halves, February-March, 16s. 6d. per cwt., c.i.f.

COD-LIVER OIL.—Bergen reports the shipment market is quiet, with quotations about maintained. Lofoten fishing results to February 13 were 27,100 tons of cod and 13,143 hectol of oil, compared with 16,611 tons of cod and 6,558 hectol of oil on the same date in 1938 and 18,286 tons of cod and 9,474 hectol of oil in 1937. Finest Lofoten steam-refined non-freezing medicinal oil, 82s. to 83s. per barrel, c.i.f. London. Small lots, on spot, about 130s. per barrel, ex store, duty paid. British finest medicinal oil, 115s. per 25-gallon drum, delivered U.K., with rebates for 25 or more drums.

COLCHICUM.—Some spot supplies of root are available at 50s. per cwt., and seeds at 1s. per lb., ex store.

COLOCYNTH.—Dealers' prices for rather full supplies range from 9d. to 1s. 2d. per lb., as to quantity and quality.

DERISS ROOT.—There was some inquiry but no evidence of business developing: 5 to 6 per cent. rotenone and 17 per cent. ether extract, 9d. duty paid, and 8 per cent. rotenone, 11d. per lb. duty paid; shipment, 17s. per cent. ether extract, 38s., c.i.f., and 4 per cent. rotenone, 62s. 6d. per cwt., c.i.f.

ERGOR.—Market has been quiet with values steady: spot, Portuguese, 4s. 3d. to 4s. 4d.; Polish, 3s. 8d. per lb., ex store, in fair quantities.

GINGER.—West African has declined to still cheaper figures: Fair African, spot, 20s.; shipment, 17s. 6d. per cwt., c.i.f. Jamaican, spot, bold, in barrels, 65s. to 75s.; medium, bold in bags, 47s.; small grinding, in bags, 40s. to 42s. 6d. per cwt., c.i.f.

GUM ACACIA.—Market has been dull and is not so steady: Kordofan, cleaner sorts, spot, about 40s.; shipment, 36s. per cwt., c.i.f.

HENBANE.—Dealers are offering small spot supplies at about 65s. per cwt., ex store.

HENNA.—Business of small account. Egyptian from 30s.; green, 33s. per cwt., c.i.f.

HONEY.—Business has been on the quiet side, but the tone is quite steady on account of the comparatively limited stocks on hand. Jamaican is fully steady at former figures with the lower grades tending rather dearer: Californian, white clover, 47s. 6d., duty paid. Canadian, 43s. to 46s. per cwt. Small lots of all descriptions at higher prices.

HYDRASTIS.—Market has been dull and is quoted cheaper: U.S.P., spot, 12s. 6d., untested; shipment, 12s. 3d. per cwt., c.i.f.; high test root, up to 14s. 3d. per lb., spot.

IPCACUANHA.—Business has quietened down but the market is steady: Matto Grosso, B.P., spot, 6s. 9d. to 7s., as to test; shipment, 6s. 6d. per lb., c.i.f.

IRISH MOSS.—Market is dull: about 45s. to 60s. per cwt. for small parcels of the best qualities.

JALAP.—A parcel testing about 8 per cent. is available at about 6d. per lb. High test root is short and there are no offers for shipments of this quality.

LAVENDER FLOWERS.—Best blue flowers are quoted on spot at about 137s. 6d., and seconds at 130s. per cwt., ex store.

LYCOPodium.—Occasional small business: spot quotations down to about 4s. per lb., ex store, for treble sifted.

MANNA.—Easy on a quiet market: finest selected flake in 1-lb. tins, 3s. 3d. to 3s. 6d. per lb., ex store.

MENTHOL.—The Japanese product has met with a better demand and the market is very steady. K/S brands, spot, 12s. 7½d. to 12s. 9d.; near afloat, 11s., c.i.f. Bids cabled to Japan, February-March, at 10s. 4½d., c.i.f., rejected and countered with offers at 10s. 9d. to 11s., c.i.f., as to shipper. Re-sellers of January-March at 10s. 6d. per lb., c.i.f. Chinese, spot, 11s. 9d. to 12s.; shipment, March-April, 10s. per lb., c.i.f. French material at competitive prices.

MERCURY.—The shipment quotation for Spanish-Italian metal has again advanced sharply and is now quoted at 77 dollars per bottle, f.o.b. Continent; spot, £16 10s. per bottle, ex store. Editorial comment on p. 184.

OPIMUM.—Fair business, with values fully steady: Turkish, 13 per cent., 1s. 2d.; Bulgarian, 15 per cent., 1s. 2d. in original cases; Iranian, 12 per cent., 1s. 1d. per unit, landed and duty paid.

ORANGE PEEL.—A supply of bitter ribbons on spot is held for 9d. per lb., ex store.

PEPPER.—Lampong, Tellicherry and Aleppy are fractionally easier, while White Muntok is quoted dearer. The Pepper Sales Control Committee having sold this year about 1,300 tons of Muntok white for export have advanced the price to 3½d. in bond. Lampong, in bond, 2½d.; shipment, January-March, 2½d.; August-October, 2½d., c.i.f. Tellicherry, spot, 4d.; shipment, March-April, 3s., c.i.f. Aleppy, spot, 3½d.; shipment, March-April, 3s., c.i.f. White Muntok, in bond, 3½d.; shipment, March-May, 3½d., c.i.f. London Terminal Market: Black, March, 2½d.; May, 2½d.; July, 2½d.; White, March, 3½d.; May, 3½d.; July, 3½d. per lb.

PIMENTO.—Quiet, market steady: spot, 8d. per lb.; shipment, March-May, 69s. per cwt., c.i.f.

QUASSIA CHIPS.—Dealers are offering spot supplies, in limited quantities, at about 22s. 6d. per cwt., ex store.

RHUBARB.—The spot market is firm, with supplies restricted in quantity and selection. Rough round continues to sell on spot from 2s. to 2s. 4d. per lb. In Shensi some medium round reported sold in bond at 4s. 9d. Medium and small, duty paid, quoted firmly from 5s. per lb. No shipment offers of any description.

RUBBER.—The quota for April-June is to continue unchanged at 50 per cent. Market has since been steadier and values have advanced, fair business: standard ribbed smoked sheet, spot, 8d.; February, 8d.; March, 8d.; April-June, 8½d.; July-September, 8½d.

SAFFRON.—Spot supplies of genuine finest Valencia are firm as quoted at 90s. to 92s. 6d. per lb. ex store.

SEEDS.—ANISE.—Spot, duty paid, Spanish, 80s.; Bulgarian, 43s.; Russian, 42s. 6d. CANARY.—Spot, duty paid, Mazagan, 15s. 6d.; Morocco, 14s. 6d.; Turkish, 13s.; Plate, 13s. 6d.; Spanish, 22s. to 36s. CARAWAY.—Spot, Dutch, 32s. 3d., duty paid; 27s. quoted f.o.b. Holland. CORIANDER.—Spot, Morocco, is offered at 17s. 6d. to 17s. 9d., duty paid, and for prompt shipment, 15s. 3d., c.i.f. CUMIN.—Spot, Malta (new crop), quoted at 44s., duty free; Morocco, 47s. 6d., duty paid, and 42s. 6d., in bond. FENNEL.—Indian, 21s. to 22s. 6d., spot, duty free. FENUGREEK.—Spot, Morocco, 12s. 9d., duty paid; Indian, 13s. 6d., duty free. MUSTARD.—English, 22s. 6d. to 31s. 6d., according to quality.

SENEGA.—Rather quiet and spot values have eased a trifle: spot, 2s. 9d. to 2s. 9½d. per lb.

SENNA.—Inquiry for home and export has been of little account: Tinnevely leaves: fair green quality, on spot, No. 1, at 6½d.; No. 2, at 4d.; No. 3, at 2½d.; No. 4, at 2½d. per lb. Tinnevely hand-picked

Pods: fair greenish at 5d. per lb.; darker grades at 3½d. to 4d. per lb.; manufacturing quality scarce at 2½d. to 2½d. per lb. Alexandrian hand-picked pods: finest selected quality unobtainable; No. 2, old crop, 2s. 3d.; No. 3, 1s. 9d.; inferior grades from 1s. to 1s. 6d. per lb., ex wharf London. Arrivals of new crop pods are still awaited in London; there is a good inquiry on hand.

SHELLAC.—Quoted easier on a quieter market: spot, standard TN orange, 39s. 6d. to 42s. 6d.; fine orange, 52s. 6d. to 80s.; pure button, 47s. 6d. to 50s. per cwt. For delivery, TN, March, 39s. 3d.; May, 40s. For arrival, TN, March-April, 38s. 6d. per cwt., c.i.f.

SLIPPERY ELM BARK.—Occasional small spot demand: 5-lb. wired bundles, selected quality, 1s. 6d. per lb., ex store.

SQUILL.—Dealers offering good white from 26s. to 27s. 6d. per cwt. Some Maltese, yellowish, at about 21s. 9d. per cwt.

STRAMONIUM LEAVES.—Spot values range from about 35s. to 40s. per cwt., as to quality.

TONKA BEANS.—Dealers are quoting bulk supplies of fair frosted Para beans at about 2s. 3d. to 2s. 4½d. per lb., ex store.

TRAGACANTH.—Market has remained quiet, but values, particularly for the white gums, are quite steady: finest selected, white ribbon, £60; No. 1, white, £55 to £57 10s.; No. 2, white, £50 to £53; No. 3, white, £35 to £42 10s.; amber leaf, £32; cleaned amber sorts, £16; brown to amber leaf, £11 10s.; red leaf, £9 to £10; hoggy, £6 to £7 per cwt., ex store.

TURMERIC.—Business in new crop has been slow: Madras finger or Rajapore, new crop, March, 28s.; April-May, 26s. 6d. per cwt., c.i.f. Madras finger, spot, 32s. per cwt., ex store.

VALERIAN ROOT.—Dealers' prices for limited quantities are steady at about 35s. per cwt., ex store.

WAXES.—**BEES'.**—Moderate demand for spot supplies reported: Dar-es-Salaam, spot, 100s.; shipment, 96s., c.i.f. Benguella, 90s., in bond; shipment, 84s. 6d., c.i.f. Conakry, 90s., in bond; shipment, 84s. 6d., c.i.f. Japanese, spot, 60s., duty paid; shipment, February-March, 52s. per cwt., c.i.f. Madagascar, f.d.e., 92s. 6d., duty paid; no shipment offers of old crop. **CARNAUBA.**—Market has been quiet, and some grades are quoted slightly cheaper: fatty grey, spot, 145s.; affloat, 140s.; shipment, February-March, 139s., c.i.f. Chalky grey, spot, 143s.; shipment, February-March, 135s., c.i.f. Primeira, spot, good quality, 185s.; shipment, February-March, 176s.; Mediana, spot, 177s. 6d.; shipment, 172s. 6d. per cwt., c.i.f.

Essential and Expressed Oils, etc.

THESE products have experienced a better demand this week, and the general tone is steady. Californian cold-pressed lemon is dearer. Japanese peppermint has sold well and is now at better values.

ANISE (STAR).—Some pressure to sell noted here and there on spot; business, however, is slow: spot, leads, nominal; tins, 3s. 3d.; drums, 3s. 2d. per lb., ex store; shipment, Hong Kong is quoting tins from 2s. 10d. per lb., c.i.f.

BERGAMOT.—First-hand suppliers report the shipment quotation for Consortium new crop oil is steady at about 15s. per lb., c.i.f. Small lots of genuine oil on spot, 15s. 3d. to 15s. 6d. per lb., with blended oils at cheaper prices.

BOIS DE ROSE.—Some spot inquiry, market steady: drums, 5s. 9d., with smaller quantities, re-packed, up to 6s. 3d. per lb., ex store; shipment, 5s. 6d., c.i.f., minimum three drums.

CAJUPUT.—Quite a fair business reported on spot: B.P., 1s. 11d. to 2s. 4d. per lb., as to quantity, spot.

CAMPHOR.—The spot market continues practically bare of supplies of either Japanese or Chinese white oil, and the price is nominal at 200s. per cwt. Inquiry at the sources fails to bring any offers for shipment.

CARAWAY.—Spot sales continue on a good scale at steady prices: Dutch rectified, 7s. 3d. to 7s. 9d.; crude, 6s. 9d. to 7s. 3d. per lb., as to quantity, landed and duty paid. Some shipment offers of Russian are reported.

CASSIA.—Shipment is firm and dear: spot, leads at about 3s. 3½d. and drums at 3s. 2½d. Shipment offers of leads from China at 3s. 4d., c.i.f.

CASTOR.—Values unchanged, market quiet: 39s. 6d. per cwt., in barrels, ex store, London. Hull, 2s. per cwt. less. Small quantities packed in cases, 4s. 6d. per cwt. extra.

CITRONELLA.—Values for the Java oil for shipment remain cheap, but the source reports steadier conditions; business on this market still quiet: Ceylon, spot, drums, from 1s. 6½d.; smaller parcels, up to 1s. 11d.; shipment, drums, about 1s. 4d. per lb., c.i.f. Java, spot, drums, about 1s. 7½d.; smaller parcels, up to 2s.; shipment, drums, about 1s. 1d. per lb., c.i.f.

CLOVE.—Rather more business reported and the general tone is steady: Madagascar, spot, drums, 2s. 7d. per lb., if available; smaller parcels, up to 3s. 3d. English distilled, 4s. 6d. to 4s. 9d. per lb., ex store.

COCONUT.—English deodorised is unchanged at £24 15s. per ton, in barrels, ex works.

EUCALYPTUS.—The chief shippers are quoting only for March-April dispatch, with their prices well maintained; spot re-sellers at comparatively cheap prices: Australian, 70 to 75 per cent., tins, 1s. 6d.; drums, 1s. 5d.; 80 to 85 per cent., tins, 1s. 8d. per lb., ex store, with

higher prices for small lots; shipment, 70 to 75 per cent., tins, 1s. 5d.; drums, 1s. 4½d.; 80 to 85 per cent., 1s. 7d. per lb., c.i.f.

GERANIUM.—As recently reported, conditions in this market are steadier, but business remains slow: Bourbon, spot, 10s. to 10s. 6d.; shipment, 10s., c.i.f. Algerian, spot, 11s. 6d. to 12s.; shipment, about 11s. per lb., c.i.f.

GRAPEFRUIT.—Business of small account: Californian, 10s. 3d. to 12s. Florida, 11s. to 12s. 6d. per lb., ex store, as to quantity.

HO (SHIU).—Spot supplies of good oil are limited and fully steady: "improved" now 4s. 10½d. to 5s., and "extra" quality up to 5s. 3d. per lb. Shipment offers for May shipment only at high figures.

JUNIPER BERRY.—More business in moderate quantities: quoted, as to quality, from about 3s. 3d. to 3s. 9d. per lb., for limited quantities.

LEMON.—A few good orders are reported in the shipment market for new crop Sicilian hand-pressed oil, with current quotations varying from 9s. 6d. to 10s. per lb., c.i.f., for branded oils. Small lots of genuine oil on spot quoted from 10s. 6d. to 11s. per lb., ex store. Machine-made oils at the usual discount. Californian distilled, regular quality, 1 dollar 54 cents per lb., landed. Californian cold-pressed is sharply dearer at 2 dollars 35 cents per lb., c.i.f. The distilled oil has been selling well, and supplies available are limited at the moment.

LEMONGRASS.—This oil continues to attract practically no attention on this market: spot, 1s. 6½d., in drums, up to 1s. 10d. per lb., as to quantity and packing; shipment, 1s. 4½d. per lb., c.i.f.

LIME.—Market is dull and unsteady: West Indian distilled is in the region of 15s. to 17s. per lb., as to quantity.

LINSEED.—Raw oil, in small quantities, 26s. 9d. per cwt.; boiled oil, 29s. 3d. per cwt., ex works.

NETMEG.—Continues steady, modest spot demand: Dutch and American, from 5s. 4½d. to 5s. 9d. per lb., as to quantity.

OLIVE.—Moderate business, with prices slightly easier: B.P., 1 per cent., 5s. 9d. to 6s. per gallon, in drums. Edible quality, ten 1-gallon tins, in cases, 80s.; twenty ½-gallon tins, in cases, 82s. 6d. per case; drums, 6s. 3d. per gallon, ex store.

ORANGE.—Brokers report the shipment market for new crop French Guinea oil is firmer and now close up to 2s. 3d. per lb., c.i.f., in drums, with some business done: spot, drums, about 2s. 8d.; re-packed in tins, up to 3s. per lb. Californian, small drums, 59 cents; two or more cases, 61 cents per lb., ex store. Florida, cold-pressed, 85 cents per lb., in drums, landed, London.

PALMAROSA.—Not much inquiry about; quotations are steady: spot, about 8s. to 8s. 1½d. per lb. for bulk purchases; shipment is steady at 7s. 6d. per lb., c.i.f. Java oil is available at about 4s. 3d. per lb., ex store.

PATCHOULI.—Values cover a wide range and usually depend on the description of the oil: Singapore, spot, 10s. 6d. to 10s. 9d.; Seychelles, spot, about 9s.; Java oil, about 9s. 3d. per lb., ex store, for original packages.

PEPPERMINT.—The Japanese product is much steadier, with quotations slightly dearer: spot is firm at 4s. 6d. to 4s. 7½d. per lb., with strong buyers at slightly less. Bids cabled to Japan for February-March have been rejected and countered with offers at 4s. 4d. to 4s. 5d., c.i.f. Active business is reported on the London market, with January-March at 4s. 2d. to 4s. 3d., c.i.f., re-sellers. Natural American oil, in drums, continues firm at 2 dollars 25 cents to 2 dollars 35 cents per lb., c.i.f.

PETITGRAIN.—Business reported to be quiet: spot, in cases, 3s. 6d. per lb.; shipment, about 3s. per lb., c.i.f., as to quantity. French, to come forward, quoted from source at 950 francs per kilog.

RAISIN SEED.—Quoted unchanged, market quiet: Californian, spot, 2s. 3d. to 2s. 6d. per lb., ex store, as to quantity.

ROSEMARY.—Fair amount of business, with the Tunis product attracting attention: genuine Spanish quoted at 3s. to 3s. 6d. per lb., as to quality and quantity. Tunis, 2s. 6d. to 2s. 8d. per lb., landed, as to quantity.

SANDALWOOD.—Genuine East Indian Mysore, in one-case lots, steady at 20s. 6d. per lb. East Indian, produced outside the province of Mysore, 18s. 6d. to 19s. per lb., c.i.f., in bulk quantities. English-made West Indian, 7s. 3d. per lb. Australian, steady at 15s. 3d. per lb., for 7-lb. tins; one case at 14s. 9d. and five cases at 14s. 6d. per lb.

SASSAFRAS.—Occasional spot demand: genuine natural oil of fine quality offered at 4s. to 4s. 3d. per lb., as to quantity. Other grades at cheaper prices.

SPEARMINT.—Limited spot inquiry: U.S.P. oil, spot, about 9s. 3d. to 9s. 4½d.; shipment, 8s. per lb., c.i.f.

SPIKE.—Genuine Spanish oil is quoted from 5s. to 5s. 6d. per lb., ex store. Blended oils at cheaper figures.

TURPENTINE (AMERICAN).—London stocks on February 11 totalled 27,721 barrels: spot, London, 34s.; Hull, 35s.; Liverpool, 36s. per cwt. Market is easier.

VETIVER.—Inquiry has been of no importance; Bourbon, about 15s. 6d. to 17s. per lb., and slightly less for drums, ex store.

WORMSEED.—Market is again quoted dearer and is firm: U.S.P., spot, 9s. 9d.; shipment, 9s. 6d. per lb., c.i.f. B.P., spot, 10s. 3d.; shipment, 10s. per lb., c.i.f.

Correspondence

Correspondents may adopt an assumed name, but must in all cases furnish their real name and address to the Editor

British Pharmaceutical Conference

SIR,—Adverting to the letter of "Senectacus" in your issue of February 11 anent the methods of the Executive Committee and the Conference. Like your correspondent, for the past forty years or so it has been my privilege and pleasure to attend many of them, and I intended to be at the Edinburgh Conference; indeed, I had secured two tickets, for my wife and myself. I had to ask the secretary to re-sell my tickets, so my cheque was returned. I know the executive are divided, *in rem*, and I feel reconsideration of their apparently arbitrary powers is an urgent need if the success of the Conference is to be continued as it was in the days of Attfield, Bentley and Ince.—Yours truly,

IN SILENTIO ET SPE (11/2).

SIR,—Although your correspondent Senectacus (*C. & D.*, February 11, p. 168) has been to most British Pharmaceutical Conferences for the last thirty years, I think he cannot have attended the science sessions so frequently as a disciple of Galen should. Presumably he is not a Branch delegate either, as his letter implies that he is most anxious to "join the ladies." He states that in the old days the chemist went to the Conference for what he could learn, but nowadays the "scientific discussions" are above the head of the practising pharmacist. If your correspondent will turn for a moment to the Edinburgh Conference he will find that some very valuable information to retail chemists was forthcoming as the result of the papers on "The Keeping Properties of Phenol Ointment," "Some Factors in the Action of Light on Bismuth Carbonate," "Liquor Eastonii Pro Syrupis," "The Preparation and Keeping Properties of Tabellæ Sodii Bicarbonatis Compositæ B.P.C. and Tabellæ Zingiberis Compositæ B.P.C." The first-mentioned was most opportune, since lately several analysts have been examining this from the point of view of the Food and Drugs Act. The attendances at the science sessions are as large to-day as they were, say, in 1914—the increased number of visitors to the Conference being due to the delegates of the Pharmaceutical Society, whose expenses are subsidised. There were about 200 at Chester in 1914; there were about 700 at Edinburgh in 1938, and I think I am not alone in the view that it would have been for the betterment of pharmacy if the Society had not taken over the Conference, but had given it a grant for research instead of spending money for this purpose at Bloomsbury Square. The Society could then have held its Delegates Meeting annually where, when and how it liked, and the question "Shall we join the ladies?" would not have arisen. What publicity the Conference gets in the lay press (apart from local journals) is due to the science papers, and the meeting would be another "Hamlet without the Prince of Denmark" if the sessions were discontinued. Moreover, the constitution of the Conference as formulated in 1863 was for "those engaged in the practice or interested in the advancement of Pharmacy, with a view of promoting their friendly reunion and increasing their facilities for the cultivation of Pharmaceutical Science . . ." I have not infrequently noticed that prior to excursions the reserving of seats in the charabancs makes for the reverse of "friendly reunion."

Yours faithfully,

OBITER DICTUM (11/2).

Reserved Occupations

SIR,—The category of "dispenser (other than pharmacist)" in the Schedule of Reserved Occupations might include many persons who have had some slight experience in the handling of drugs, but whose practical experience of dispensing is negligible and who have had no proper training. Further, a smattering of knowledge might be taken advantage of by persons who wished to avoid other forms of service. To some extent this affords an illustration of the pitfalls pharmacists dig for themselves by the employment of persons who have no intention of qualifying, but who pick up a rudimentary acquaintance of dispensing. After a few months in a pharmacy these call themselves chemists' assistants, and when this title is given as their calling before a recruiting or other tribunal "assistant" gets left out on one or other of the

forms and they are classified as chemists. The public always refer to us as "chemists," and we have no wish to lose a title, but I think it is an advance, and also a recognition, that the Government have included us as a body in this Reserved Schedule as "pharmacists," and not under the general heading of "chemical trades" as formerly.

Yours faithfully,

VOLUNTEER (11/2).

World Wide Pharmacy

SIR,—I am always interested in pharmaceutical affairs in other parts of the world, and usually find in your weekly issues one or two items of worldwide—as contrasted with parochial—importance. In this particular, your issue of February 11 is indicative of the far-flung influence of the *C. & D.* I find items of personal moment in the deaths of Mr. C. F. Heebner, of the Toronto College of Pharmacy, and of Mr. Walter F. White, of India. Dean Heebner and Toronto College have been synonymous for many years, and the name of White as representative of British drug trade interests in India has lasted for as long as I can remember and apparently will last long after we old stagers (who remember Charlie White) have gone. The news regarding the age limit for employees in Denmark to secure an independent business is not very heartening for advocates for the licensing of pharmacies here, but it is obvious from the ages given of practising pharmacists that ours is a healthy occupation in Denmark at least. The new Swedish laboratory which analyses the patent medicines of the country "and controls the prices charged" should be useful as an example to be put forward by those who clamour for greater restrictions on proprietaries here. Passing on to the United States, there are hints for the National Pharmaceutical Union in regard to pharmacy week, and for the scientists who rule the British Pharmaceutical Conference in the U.S.P. standards revision. I also enjoyed reading the account given by Mr. John Cameron of what has been going on in pharmacy in China during the past year. Mr. Cameron seems to have travelled seven thousand miles through a war-infested country amid difficulties of which one ordinarily hears nothing. From China one wanders to British East Africa, where it is evident that competition in pharmaceuticals is becoming a matter which British manufacturers would do well to look into.

Yours truly,

WANDERER (14/2).

Points from Letters

Appreciations

May I take this opportunity of expressing my appreciation of the *C. & D.*, and especially congratulating the paper on its "Course of Photographic Studies."—T. N. (12/2).

Modern Prescribing

R. B. (6/2) writes: The following was handed in this evening for compounding, signed by a well-known medical practitioner:—

Tabs. Novalgin

Sig. Two morning and night and one in the middle of the day.

Alkia Saltrates

Sig. A teaspoonful in $\frac{3}{4}$ tumblerful of warm water three times a day.

Eades Pills

Sig. Two at bedtime.

Acquiring the Art

To date, the work performed in the average pharmacy is not sufficient to warrant the outlay necessary for even small-scale machinery, but even if such machinery were generally adopted the student should still cultivate a high degree of manipulative skill. He may find himself in some situation where machine aid is not available and manual work becomes inevitable.—H. R. (5/2).

Miscellaneous Inquiries

We do not undertake to analyse and report upon proprietary articles nor to publish supposed formulas for them

W. A. S. (13/2).—COSMETIC FORMULAS.—"Pharmaceutical Formulas," Volume II, published by THE CHEMIST AND DRUGGIST at 15s. 6d., includes numerous formulas for cosmetics and directions as to their compounding.

J. A. L. (13/2).—(1) TERPINEOL ODOUR.—Terpinol, which is one source of terpineol, would probably have the type of odour required. Small additions of other substances such as benzyl acetate and hydroxycitronellal might also intensify the odour.

(2) FLOOR POLISH.—Hard paraffin would be the cheapest form of wax to include in such polishes, and the following makes an inexpensive product:—

Hard paraffin	15 oz.
Ceresin	10 oz.
Oil of turpentine	45 oz.

(3) TURPENTINE SUBSTITUTE.—A mixture of the higher fractions of petroleum, known as white spirit, is sold for this purpose, and has a specific gravity and boiling point approximating the figures you mention.

E. B. (13/2).—SYRUP OF CUP MOSS.—A decoction is made from 2 oz. of the cup moss plant (*Cladonia pyxidata*) to 1 pint of water sweetened with honey or syrup of tolu is usually supplied when syrup of cup moss is asked for. The plant has been used as an expectorant for children.

A. O. M. (21/1).—BATH SALTS.—The basis of bath salts is usually either sodium carbonate, sodium sesquicarbonate, sodium biborate, sodium phosphate, or sodium sulphate. These may either be used singly or two or more may be mixed. The colours used for bath salts are usually aniline dyes, such as the following: red, neutral red or eosin; pink, eosin, erythrosin, safranin; orange, chrysoidine; yellow, tartrazine; green, naphthol green; heliotrope, phenol red. The dye solution can be sprayed on the crystals or the latter can be immersed in a coloured saturated solution of the crystal. Perfumes in general demand are pine, verbenal, cologne, and lavender. Oils of pine and verbenal are used in the two former, and the following are examples of essences of the two latter:—

Cologne		Lavender	
Oil of lemon ..	2 parts	Oil of lavender ..	8 parts
Oil of bergamot ..	3 parts	Oil of rose geranium,	
Oil of sweet orange ..	2 parts	Tincture of musk, of each	2 parts
Oil of petitgrain ..	1 part	Tincture of civet ..	1 part
Oil of verbenal ..	0.1 part	Tincture of benzoin ..	2 parts
Oil of rosemary ..	0.2 part	Oil of bergamot ..	1 part
Tincture of musk ..	0.5 part	Spirit	4 parts
Spirit	11.2 parts		

A. L. P. (10/2).—PAYMENT FOR INSURANCE BANDAGE.—In Scotland the bandages which can be supplied on an Insurance prescription at the expense of the Drug fund are those included in the list of appliances in the second schedule to the Medical Benefit Regulation (Scotland), 1938. Zinc and ichthyol bandages are not included therein, and therefore are to be disallowed. As every panel practitioner and panel chemist is supplied with a copy of the Drug Tariff, which includes the prescribed list of appliances, they are assumed to be familiar with it. The practitioner therefore ought not to prescribe an appliance not included in the prescribed list, and the chemist is not required to supply such an appliance. There is no regulation in Scotland whereby the responsibility for payment for a non-scheduled appliance automatically falls upon the doctor as is the case in England and Wales.

F. T. (27/1).—CLOCK OILS.—The following formulas are taken from "Pharmaceutical Formulas," Vol. II:—

(1) Black oxide of antimony ..	1 oz.
Small shot	4 oz.
Almond oil	20 oz.

Expose in a white glass bottle to sunlight for a month, shaking occasionally, and decant the clear oil.

(2) Place a coil of clean lead in a white glass bottle and fill with almond oil. Expose to the sun until all the curdy matter is deposited and decant the clear oil.

E. J. (26/1).—WALL VARNISH.—The resin spirit mentioned in the formula you refer to consists of the lighter and more volatile oily portion of the product of dry distillation of resin.

It is a colourless liquid, insoluble in water or alcohol, but soluble in all proportions in ether, petroleum and turpentine. The hydrocarbons contained in it include pentane, pentene and their homologues, toluene and its homologues, terpenes and others. About half of resin spirit consists of hydrocarbons boiling below 120° C. The soda solution referred to in the formula is sodium carbonate solution.

J. K. B. (13/2).—MORTAR CEMENT.—Equal parts of gutta percha and shellac, fused together in an iron vessel, form a powerful cement. The fractured surfaces must be strongly heated, a little of the cement applied, and the pieces brought together under pressure. The following is an alternative formula:—

Isinglass, fine cut	1 oz.
Powdered glue	1 dr.
Distilled water	2 oz.
Salicylic acid	10 gr.

Put the isinglass and glue in a gallipot, add the salicylic acid and the water, pressing down the isinglass with a pestle until it is all soaked. Place the gallipot in a saucepan of water, bring to the boil, stirring until dissolved; then add acetic acid (33 per cent.) 1 oz., and mix well.

A. W. (2/2).—OYSTER NUT.—The botanical name of this nut is *Telfairia pedata*, belonging to the natural order Cucurbitaceae. The following is a description of the plant:—Root stout, fleshy; stem perennial, 50-100 ft. long; leaves long-petioled; leaflets, 3-5 in. long, acuminate, repand-toothed, glabrous except nerve beneath; flowers pale purple; fringed, male 2 inches across; petals obovate-cuneate; female flowers about 4 inches across; ovary obtusely 10-ribbed; fruit fleshy, sometimes weighs 60 lb., 200-300 seeded; seed 1 inch broad, edible. The seeds are roundish, about an inch across, and the kernels are sweet to the taste and are said to be as good as almonds. The negroes of tropical Africa boil and eat them. These seeds also yield an abundance of oil which has been said to be equal to olive oil. The fruit becomes 1½-3 feet long and 8 inches wide. It is oblong in shape, has 10-12 deep furrows and is always green. Both male and female flowers are 5-lobed, copiously fringed and purple in colour, the females somewhat brownish with a circular green throat, while the males have a 5-pointed star of green in the middle. The male flowers are about 2 inches across, females 4 inches across, with an ovary 2 inches long. The foliage has an unpleasant smell when bruised.

Retrospect of Fifty Years Ago

Reprinted from

"The Chemist and Druggist," February 16, 1889

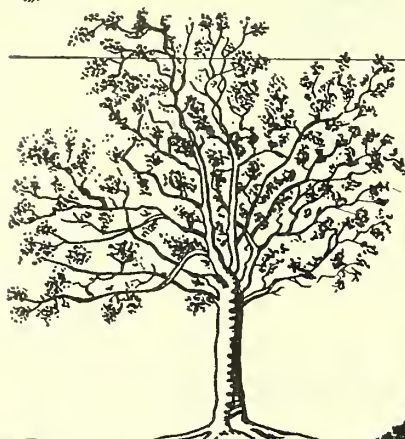
Pharmaceutical Progress and Poverty

In order to meet the cost of the new Examination Hall—originally estimated to be about £6,000—nearly £11,000 worth of remunerative securities have been disposed of. The Council is about to embark on the remainder of the building scheme, the preliminary estimate for the rebuilding of 15 and 16 Bloomsbury Square being £6,700; of this £3,000 will be in the nature of an investment; but the amount which the building, decorating and fitting up the Society's new house will ultimately cost before the further expense of occupying it has to be faced is still vague. We may, however, pretty safely reckon that by that time at least £18,000 of the Society's capital will be locked up in its unremunerative buildings. Meanwhile ordinary expenditure has been increasing. In 1887 the surplus to the good was less than £500; but last year that balance was more than anticipated; £600 was spent on research; an additional annuity of £100 was granted, and unless there has been rigid saving in other departments these must have been paid out of capital, for it is evident that investments have yielded less, and 121 fewer subscriptions are an item which cannot be ignored. Of course, we must not forget, the president tells us, that early next century the ground-rents belonging to the Society will fall in—£5,551 5s. 6d. is their present value. But what does that avail in a quarter of a century's memories of progress and a generation's struggle with the pinch of poverty?

B.I.F. 1939

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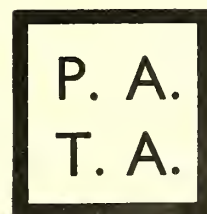
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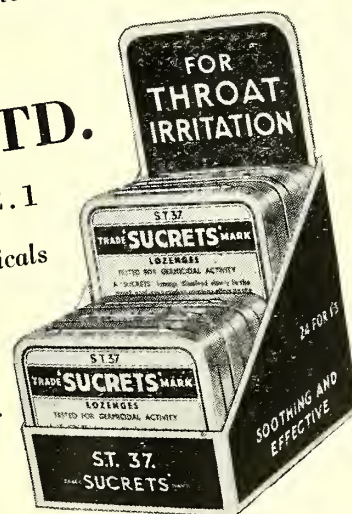
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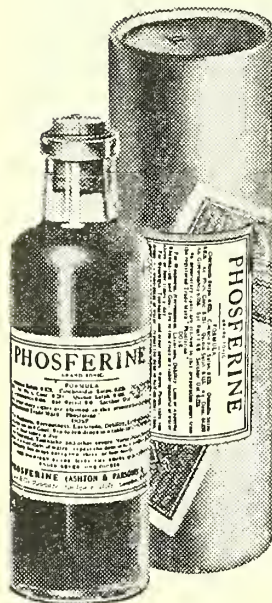
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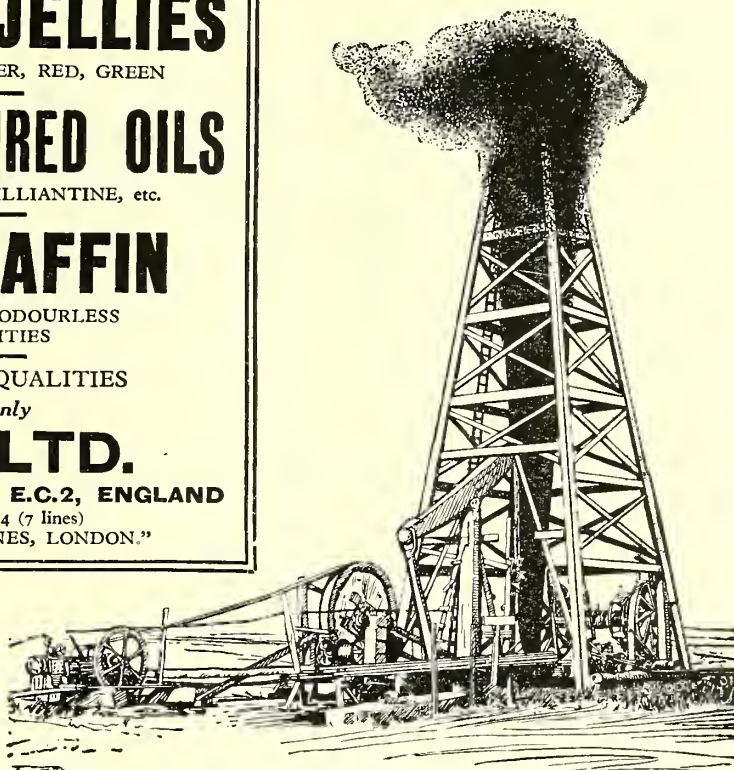
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Carbohydrates	absent	6.2%	Carbohydrates	absent	9.1%	Carbohydrates	absent	11.8%
Protein	absent	absent	Protein	absent	absent	Protein	absent	absent
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When used for *prevention*, only 3 out of 140 developed the disease and those 3 were mild atypical cases.

Packages: 3 vials—2 cc. each, 6/3
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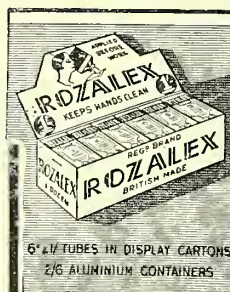
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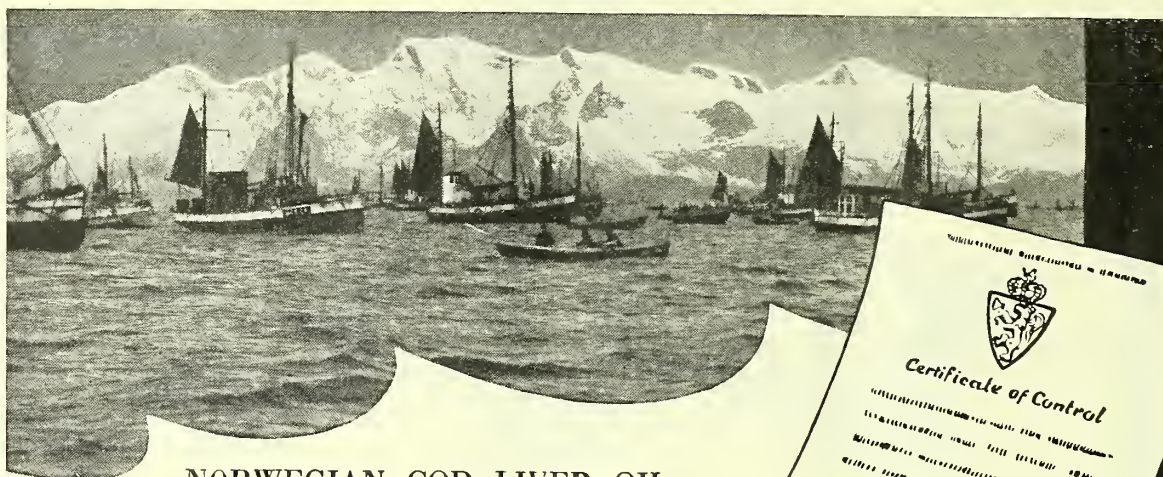
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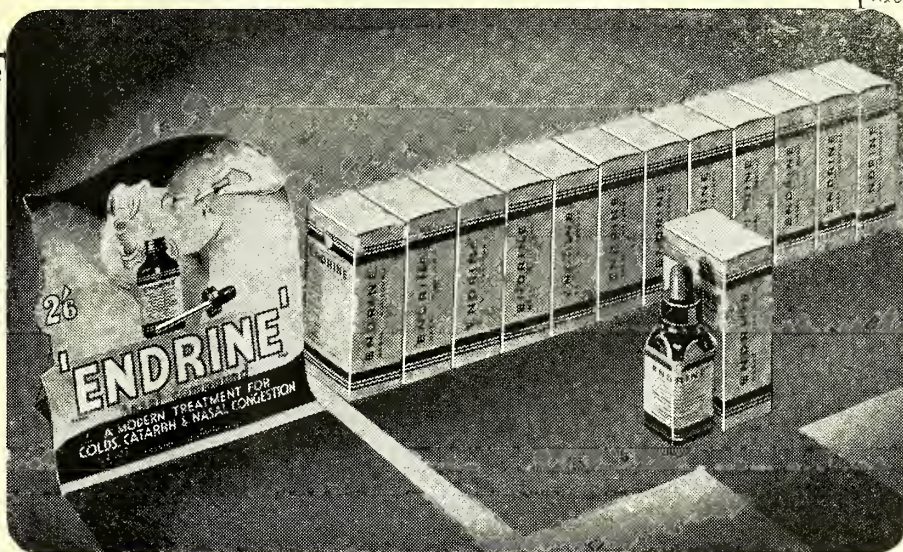
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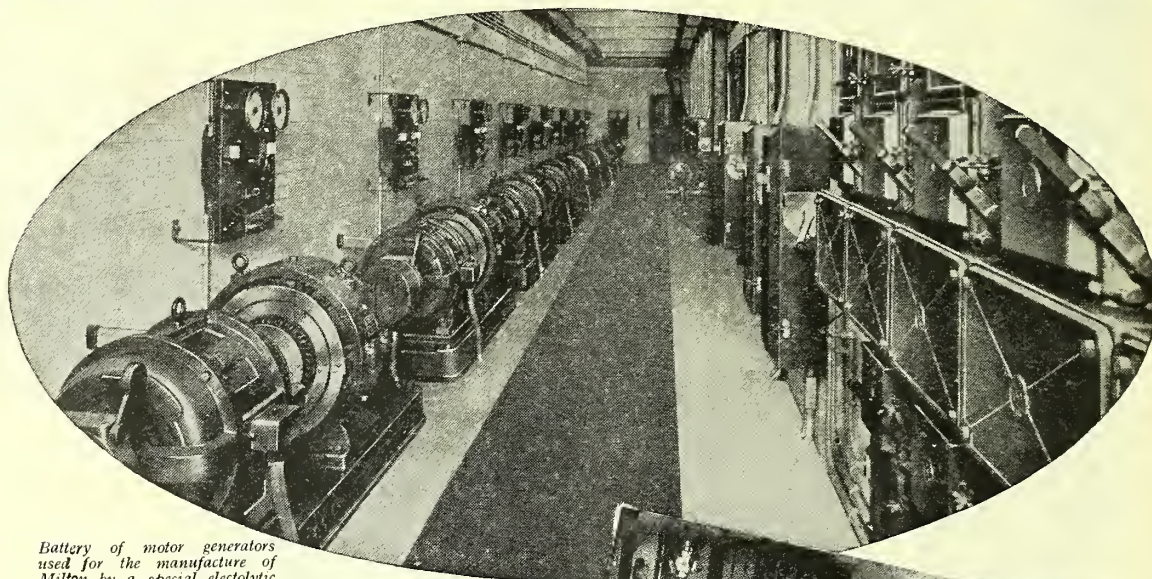
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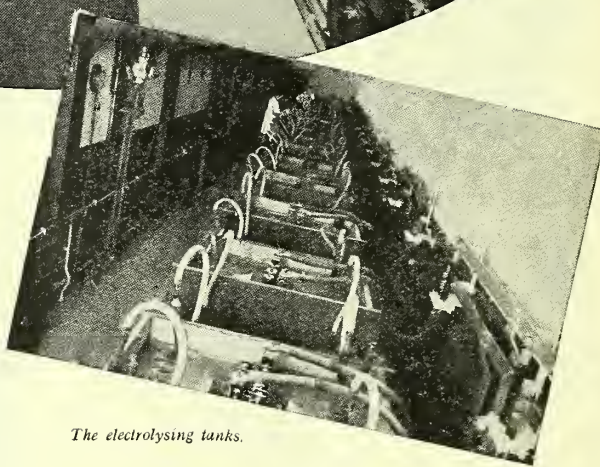


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The electrolysis tanks.

Milton, despite its "inactivation," thus enjoys the advantage of an invaluable detergent action absent in the phenylic class of antiseptics, which coagulate albumen and proteins and have little or no penetrative power. The penetrative power of Milton is twice that of Dakin's standard Fluid and will be dealt with in a separate announcement.

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the safe antiseptic for use in or on the human body

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Pleasant flavour
For children & adults
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Pleasant flavour. For children and adults.
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Special Display Terms—"Thirteen to the Dozen"



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